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The Dimensionality of Deviant Employee Behavior in the Workplace

By

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Reliability analysis and LISREL analysis suggest support for the use of eleven categories of deviant behavior: 1) Theft and Related Behavior, 2) Destruction of Property, 3) Misuse of Information, 4) Misuse of Time and Resources, 5) Unsafe Behavior, 6) Poor Attendance, 7) Poor Quality Work, 8) Alcohol Use, 9) Drug Use, 10) Inappropriate Verbal Actions, and 11) Inappropriate Physical Actions. Results suggest that the relationships between the categories of behavior vary across categories.

Results of principal components analysis using the self ratings suggest a strong common factor underlying all of the categories of deviant behavior. Multidimensional scaling analysis using the co-occurrence data suggests that deviant behavior categories vary on two dimensions: a personal versus impersonal dimension and a task-related versus not task related dimension. Multidimensional scaling results using the self ratings yield an uninterpretable solution.

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THE DIMENSIONALITY OF DEVIANT
EMPLOYEE BEHAVIOR IN THE WORKPLACE

By

MELISSA L. GRUYS

A thesis submitted in partial fulfillment
of the requirements for the degree of
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Abstract

The study investigated the dimensionality of deviant employee behavior by examining the relationships between various deviant behaviors. Knowledge of the relationships between various deviant employees behaviors will eventually contribute to more effective prediction and prevention of employee deviance in the workplace.

The study utilized two different samples and two data collection methods. An undergraduate student sample (N=115) and a sample of alumni from a liberal arts college (N=343) completed self ratings on eighty-seven deviant behavior items by indicating whether they would engage in each behavior. In addition, the alumni sample completed an additional section of the survey which included providing ratings of the co-occurrence of various categories of deviant employee behavior.

At the item level, in general, the deviant behavior items were found to be positively related. There were no significant negative correlations among the behaviors. A particularly interesting finding was the extreme similarity of the self ratings made by the two very different samples in terms of means and standard deviations for all of the behavior items.

Reliability analysis and LISREL analysis suggested support for the use of the following eleven categories of deviant behavior: 1) Theft and Related Behavior, 2) Destruction of Property, 3) Misuse of Information, 4) Misuse of Time and Resources, 5) Unsafe Behavior, 6) Poor Attendance, 7) Poor Quality Work, 8) Alcohol Use, 9) Drug Use, 10) Inappropriate Verbal Actions, and 11) Inappropriate Physical Actions. The relationships between the categories of behavior were examined and results indicate that the relationships vary across categories.

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Results of principal components analysis using the self ratings for both samples suggest a strong common factor underlying all of the categories of deviant behavior. Multidimensional scaling analysis using the co-occurrence data suggests that the deviant behavior categories vary on two dimensions: a personal versus impersonal dimension and a task-related versus not task related dimension. When comparing the multidimensional scaling analysis results for the ratings of co-occurrence of the categories and for the self ratings, the solutions differ substantially. It is interesting and at the same time frustrating that results from the two data collection methods do not converge. At this time, there can only be speculation with regard to why the results using the two types of ratings differ.

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Introduction

In any organization, managing the behavior of employees is a major concern. Specifically, organizations wish to have employees who will carry out the tasks, duties, and responsibilities of their positions and who will not engage in actions which will harm the organization, its other employees or its customers in any way. Such behavior which causes harm is undesirable and is considered to be deviant. However, research has shown that deviant behavior in the workplace is fairly prevalent. For example, a Society for Human Resource Management study (1993) surveyed 479 human resource professionals about violence in their organizations. Results indicate that the organizations in which respondents worked reported incidents involving fistfights (74.8%), shootings (17%), stabbings(7.5%), and rape/sexual assault (6.5%). Other research has surveyed employees with regard to their involvement in deviant behavior in the workplace. One such study reported that seventy-five percent of employees had stolen from their employers at least once (McGurn, 1988). Another study reported that 62 percent of fast food restaurant workers and 42 percent of supermarket workers reported some type of cash or property theft from their employers (Slora, 1989).

Deviant employee behavior in the workplace can be detrimental to organizations. Such behavior by employees can have enormous costs to employers. The direct costs of theft, sabotage, and other such actions may well be large. It has been estimated that the cost to employers of employee theft alone may be up to $200 billion annually (Buss, 1993; Camara & Schneider, 1994). In addition to direct costs to businesses from theft and other deviant behavior in the workplace, there are also indirect costs which result from

such behavior. For example, loss of productivity, loss of reputation, and even loss of customers may result.

The previous provides examples of the prevalence and cost of deviant behavior in the workplace. It is not suggested that all employees engage in these kinds of behavior nor that those who engage in it do so to a great extent. However, research does suggest that some employees do engage in such behavior. Thus, it is important to pursue the study of this type of behavior.

Additional support for the study of deviant employee behavior in the workplace is related to the current interest in modeling job performance (e.g., Campbell, 1990; Campbell, McCloy, Oppler, & Sager, 1993). In a sense, such efforts attempt to outline what defines "productive" behavior in the workplace. Thus, it also follows that it is important to consider what types of behavior are counterproductive or deviant and also to consider the effects of such behavior. This further justifies the importance of the study of deviant behavior in the workplace.

Research in the area of deviant behavior in the workplace has been pursued for decades in a variety of forms. Many studies have aimed to determine the base rates of such behaviors and have attempted to predict these behaviors. Generally, each study has focused on a single type of deviant behavior (e.g., theft from employer). Thus, the literature which addresses deviant behavior in the workplace is in disarray. This is likely due to the fact that there exists no comprehensive framework or theory with regard to deviant behavior in the workplace.

The existing literature has not adequately addressed the dimensionality or the

structure of deviant employee behavior. One may wonder whether there is a single underlying dimension which is related to employees engaging in various types of deviant behavior in the workplace. Or, perhaps there are multiple dimensions which correspond to deviant employee behavior. Since a single study has investigated this issue, the current study further addresses the dimensionality of deviant behavior in the workplace. The first section of this report focuses on defining employee deviance. The second section provides a historical look at the study of deviance and discusses relevant literature. The third section reviews literature which is specifically related to the study and outlines how the study will contribute to the understanding of deviant employee behavior. The fourth section addresses other factors which are related to deviant employee behavior in the workplace and the last section describes the study in detail.

Definition of Deviant Behavior

This section will be divided into three portions. The first portion will discuss the definition of deviance in a broad sense. The section portion will compare and contrast definitions of workplace deviance which have been proposed. The last portion will present the working definition which will be used for the study and provide rationale for its use.

How should "deviance" be defined? The term can be defined in a variety of ways. Terry and Steffensmeier (1988) identify the difficulty inherent in conceptualizing a term as broad as deviance with the following statements:

> "The first problem confronting theorists of deviance is to come to grips with the seeming complexity of the phenomenon. This is not an easy task, since deviance consists of such a massive range of phenomena that it is difficult, if not impossible, to delineate the boundaries of the field.

Essentially, this boils down to a problem of differentiating between deviance and non-deviance." (page 56).

It is clear the difficulty which exists in defining and conceptualizing an area as complex as deviant behavior. There is no widely-accepted definition of deviance and researchers in various fields commonly define deviance in different ways. For example, the field of criminology defines deviance as behavior which violates laws which have been enacted. In contrast, sociologists and psychologists generally consider deviance to be behavior which violates the norms which have been established within a social group or organization. If the various definitions of deviance are considered, many different types of behavior and actions can be considered to be deviant. For example, criminal actions, substance abuse, other types of excessive behavior, and minor rule breaking could be all considered to be deviant.

For the purposes of this study, the focus will be limited to deviant behavior in the workplace. Various definitions and conceptualizations of deviant workplace behavior have been proposed. There are at least nine different terms which have been used in the literature to refer to the same behavioral domain (1) antisocial behavior (Giacalone & Greenberg, 1996), (2) workplace deviance (Robinson & Bennett, 1995; Robinson & Bennett, 1997), (3) employee vice (Moberg, 1997), (4) organizational misbehavior (Vardi & Wiener, 1996), (5) workplace aggression (Baron & Neuman, 1996; Folger & Baron, 1996), (6) organizational retaliation behavior (Skarlicki & Folger, 1997), (7) noncompliant behavior (Puffer, 1987), (8) organization-motivated aggression (O'Leary-Kelly, Griffin & Glew, 1996) and (9) organizational delinquency (Hogan & Hogan, 1989).

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Table 1 provides the definitions proposed by each one of these approaches.

Insert Table 1 About Here

A review by Robinson and Greenberg (1998) carefully evaluated eight of these definitions and outlined characteristics which differentiate the behavior which is included in the various terms. The five characteristics which were discussed are: (1) the perpetrator, (2) intentionality, (3) target of the behavior, (4) nature and execution of the behavior, and (5) consequences of the behavior. An overview of each of these five areas is presented here. This overview includes a discussion of how the nine terms differ with respect to that particular characteristic. The material presented in this section is based on the Robinson and Greenberg (1998) review as well as the original sources.

The first characteristic upon which various definitions differ is the identity of the perpetrator. Most of the definitions consider only behavior by insiders or organizational employees. However, the definition of organization-motivated aggression (O'Leary-Kelly, Griffin & Glew, 1996) also includes actions by outsiders (e.g., clients, customers and members of the public).

Intentionality is the second characteristic upon which various definitions differ. Most of the definitions imply or formally require that behavior must be intentional. Thus, accidental actions and those which are not consciously performed are excluded from these definitions. For example, workplace aggression (Baron & Neuman, 1996; Folger & Baron, 1996), organizational retaliation behavior (Skarlicki & Folger, 1997), and

Table 1

Definitions of Workplace Deviance

Construct	Author(s)	Definition
Antisocial behavior	Giacalone & Greenberg (1997)	Any behavior that brings harm, or is intended to bring harm to the organization, its employees, or its stakeholders.
Workplace deviance	Robinson & Bennett (1995, 1997)	Voluntary behavior of organizational members that violates significant organizational norms and, in so doing, threatens the well-being of the organization and/or its members.
Organizational vice	Moberg (1997)	An act that betrays the trust of either individuals or the organizational community.

Table 1 continued

Definitions of Workplace Deviance

Construct	Author(s)	Definition
Organizational misbehavior	Vardi & Wiener (1996)	Any intentional action by members of organizations that violates core organizational and/or societal norms.
Workplace aggression	Baron & Neuman (1996); Folger & Baron (1996)	Any form of behavior by individuals that is intended to harm current or previous coworkers or their organization.
Organization-motivated aggression	O'Leary-Kelly, Griffin & Glew (1996)	Attempted injurious or destructive behavior initiated by either an organizational insider or outsider that is instigated by some factor in the organizational context.

Table 1 continued

Definitions of Workplace Deviance

Construct	Author(s)	Definition
Organizational retaliation behaviors	Skarlicki & Folger (1997)	Adverse reactions to perceived unfairness by disgruntled employees toward their employer.
Noncompliant behavior	Puffer (1987)	Non-task behaviors that have negative organizational implications.
Organizational delinquency	Hogan & Hogan (1989)	No formal definition provided: said to be a syndrome which is the result of employee "unreliability." Counterproductive acts are elements of the syndrome.

organization-motivated aggression (O'Leary-Kelly, Griffin & Glew, 1996) all include

behavior which is "intentionally harmful." Retaliatory behavior (Skarlicki & Folger,

1997) and organization-motivated aggression (O'Leary-Kelly, Griffin & Glew, 1996)

include behavior which is carried out in response to some factor in the organizational

context (e.g., a perceived injustice). It follows then that these approaches assume the

perpetrator intends to carry out the behavior.

However, all approaches are not limited to intentional behavior. The

conceptualizations of employee vice (Moberg, 1997) and organizational delinquency

(Hogan & Hogan, 1989) include unintentional behavior which has negative

consequences. Moberg's presents employee vice as deviance which is the result of

personal character flaws. Thus, even though behavior may not be intentional, it is still

considered to be deviant in the workplace setting. Hogan and Hogan's (1989) present the

concept of organizational delinquency as being the result of "employee unreliability,"

which can be described as a personality characteristic. Thus, intentionality is not required

for behavior to be included in this definition.

The third characteristic upon which various definitions differ is the target of the

deviant behavior. The target of the behavior may be the organization or it may be one or

more members of the organization. Many definitions include behavior which is directed

at both organizational and at individual targets (Baron & Neuman, 1996; Giacalone &

Greenberg, 1996; O'Leary-Kelly, Griffin & Glew, 1996; Skarlicki & Folger, 1997). When

deviance is directed at individuals, the definitions generally include actions against

insiders (i.e., those working within the organization). The exception is organizational-

motivated aggression (O'Leary-Kelly, Griffin & Glew, 1996) which also includes actions against outsiders (i.e., those not working within the organization). Clients and members of the public may be included in the category of outsiders.

In addition to organizational and individual targets of deviance, there are also other potential targets. For example, Neuman and Baron (1997) and Folger and Baron (1996) include behavior targeted at former co-workers and Giacalone and Greenberg's (1996) definition of antisocial behavior includes behavior which is harmful to organizational stakeholders.

The nature and execution of the action is the fourth characteristic upon which various definitions differ. The nature of the action is the first issue. Several of the proposed terms include behavior which violate either societal or organizational norms (Puffer, 1987; Robinson & Bennett, 1995; Vardi & Weiner, 1996). As such, these approaches focus on the actions rather than the consequences of the action. Other definitions focus on the consequences and view behavior as deviant if it brings harm to the target of the behavior (Baron & Neuman, 1996; Giacalone & Greenberg, 1996; O'Leary-Kelly, Griffin & Glew, 1996; Puffer, 1987; Skarlicki & Folger, 1997).

The execution of the action is also a concern. Some of the approaches which focus on workplace aggression (Baron & Neuman, 1996; Neuman & Baron, 1996) distinguish actions on three dimensions. The definitions differentiate between actions which are (1) "direct" (aimed directly at the target) or "indirect" (aimed at the target by way of an agent), (2) "active" (inflicting harm) or "passive" (withholding benefits), and (3) verbal or physical.

The last characteristic upon which various definitions differ is the consequences of the deviant behavior. Most of the definitions include behavior which results in harmful consequences or which at least has the potential to cause such consequences. For example, antisocial behavior (Giacalone & Greenberg, 1996) is defined as: "Any behavior that brings harm, or is intended to bring harm to the organization, its employees, or its stakeholders." Robinson and Bennett (1995, 1997) not only focus on the consequences of the behavior, but also distinguish between acts with potential for minor consequences and those with potential for more serious consequences by including that acts which violate norms must threaten the well-being of the organization and/or its members.

The preceding section outlined various potential conceptualizations of deviant workplace behavior. The variety of definitions makes clear the difficulty in defining such behavior. Robinson and Greenberg (1998) draw attention to the importance of defining deviance and delimiting the domain of interest. They say, "Although theorists have identified a wide variety of behaviors they consider to be deviant...it is unclear exactly where to draw a boundary separating deviant behavior from nondeviant behavior" (pg. 20). They go on to emphasize that researchers and theorists should continue to strive to better define deviant workplace behavior. For this study, a single definition had to be employed. The following will outline the process of narrowing down potential definitions and provide rationale for the definition which was ultimately formulated for the study.

The purpose of this study was to describe and gain further insight into the structure and dimensionality of deviant workplace behavior. Thus, it was important to

include in the study a wide range of behaviors. As a result, breadth was the main factor in determining a working definition for the study. In general, the definitions which have been reviewed seemed too restricting. Several of the definitions which have been discussed above focus on behavior which is carried out in response or retaliation to some feature of organizational context (e.g., a perceived injustice) (Skarlicki & Folger, 1997; O'Leary-Kelly, Griffin & Glew, 1996). Not all deviant workplace behaviors are carried out in response to organizational contextual factors. For example, an employee who talks to a co-worker rather than working does not necessarily do so in response to an organizational factor. Thus, these definitions are not sufficiently inclusive. Noncompliant behavior (Puffer, 1987) is defined as "non-task behaviors that have negative organizational implications." This definition is also too limited as some deviant actions may correspond to task-related behaviors. For example, an employee carrying out a job task more slowly than a performance standard or norm would not be considered to be deviant under the noncompliant behavior definition. This type of behavior should be included in the definition of deviant employee behavior, however, so this definition is not broad enough.

Robinson and Bennett (1995, 1997) employ the following definition of deviant behavior: "voluntary behavior that violates significant organizational norms and in doing so threatens the well-being of the organization, its members, or both." While this definition is more inclusive than some of the others, there is also a potential problem with this definition. The phrase "threatens the well-being of the organization, its members, or both" is troublesome. By including the portion which refers to the threat to well-being in

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the definition, there is an implication that the behavior must possess a certain level of severity or seriousness which would threaten the organization, its members, or both. For example, if an employee steals $1,000 from his or her employer, would this be considered to be deviant under this definition? Whether it is considered deviant under this definition could perhaps be dependent on the financial resources which are available to the organization. The loss of $1,000 may threaten the well-being of a small company but not threaten the well-being of a Fortune 500 company. It is clear that all employers would see the action of an employee stealing the money as equally undesirable though, regardless of its level of financial resources of the organization. Thus, it is important to employ a definition which unequivocally includes undesirable behaviors of this type.

A broader definition is employed by Giacalone and Greenberg (1996). They define antisocial behavior as, "Any behavior that brings harm, or is intended to bring harm to the organization, its employees, or its stakeholders." This definition requires that either a behavior causes harm or is intended to cause harm in order to be considered deviant. This is problematic. Actions may not be intended to cause harm and may not cause harm, but may still be undesirable from the organization's perspective. For example, an employee may endanger him- or herself by not following safety procedures. Even if no harm is intended and no harm is done to the employee as a result of this action, this type of behavior is still not in the interest of the organization. Thus, this definition is not broad enough.

<u>Working Definition for the Current Study</u>

It has been outlined why none of the formerly proposed definitions were adequate for use in this study. In order to accurately describe the dimensionality of deviant workplace behavior, a broad range of such behaviors must be included in the study. Therefore, the working definition of deviant employee behavior in the workplace which was used in the study is as follows:

> Any intentional behavior by an organizational member which violates significant organizational norms in a manner which is contrary to the interest of the organization."

Organizational norms are described as those prescribed by formal and informal organizational policies, rules, and procedures. In this study, group norms were not considered.

In conjunction with this study, the terms "employee deviance" and "deviant employee behavior" were employed. These terms were used rather other terms which have been proposed because these other terms (e.g., workplace deviance) potentially imply the inclusion of behavior on the part of individuals other than organizational members. For example, a former employee may come back to take revenge against the supervisor who fired him or her or a customer may assault an employee. The current working definition includes only behavior of organizational members. As such, the term "employee deviance" more accurately reflects the behavior which is encompassed in the working definition. Additionally, since one of the primary aims of research in this area was describing and understanding deviant behavior on the part of employee in an effort to better predict such behavior, this also supported the use of the term employee deviance.

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With this definition of deviant employee behavior, the focus is on the behavior itself, rather than on the results or consequences of the behavior (e.g., the harm which is done). Only intentional behaviors are included in this definition. The definition encompasses behavior which is targeted at both individuals and at the organization. Behavior of organizational members is included but the behavior of outsiders (e.g., clients, former employees) is not included. It is clear that this definition is quite inclusive. It can be seen as a compilation of aspects of the previously proposed definitions. This ensured that a broad range of behaviors could be included in the study and allowed for a more complete picture of the dimensionality of deviant employee behavior.

Literature Review

This section provides insight into the history of the study of deviance and reviews relevant literature. Such information allows for a better understanding of the research area in general and also provides context for the study.

Prior to the early 1980's, there were studies on a wide range of behaviors which can be considered to be deviant in the workplace. For example, there were studies involving: employee theft, pilferage, sabotage, slow and sloppy performance, tardiness and absenteeism (e.g., Altheide, Adler, Adler, & Altheide, 1978; Bensman and Gerver, 1963; Cressey, 1953; Gouldner, 1954; Henry, 1978a, 1978b; Horning, 1970; Mars, 1973; Robin, 1969, 1970; Roy, 1953, 1959; Taylor and Walton, 1971). However, due to the lack of an accepted framework or theory for looking at such behaviors, these studies were seen as investigations into different types behavior, but not necessarily as an effort to explore employee deviance.

Hollinger and Clark (1982, 1983) progressed toward building a framework for viewing deviant behavior in the workplace when they proposed that deviant behavior could be divided into two broad categories, "property deviance" and "production deviance." Property deviance pertains to employees stealing or damaging the property or assets of their employers. This category includes actions such as taking money, supplies or other items from the employer, misusing discount privileges, and getting paid for more hours than were actually worked (Hollinger, 1982, 1983). Production deviance deals with behaviors which violate norms about the production or work in the organization. For example, this category includes behaviors like absenteeism and tardiness, sick leave abuse, doing sloppy work, and engaging in drug or alcohol use on the job (Hollinger, 1982, 1983b).

In addition to property and production deviance, a third category of deviant behavior called "altruistic property deviance" was proposed by Hollinger, Slora, and Terris (1992). Altruistic property deviance is considered to be a unique form of property deviance. This category, as property deviance does, includes behaviors which deal with the assets and property of the organization. However, this category includes instances in which an employee gives away company property or sells it at a large discount to others rather than taking the property for their own gain (Hollinger et al., 1992).

Two additional categories of deviant workplace behavior, political deviance and personal aggression, were proposed by Robinson and Bennett (1995). These categories were defined as a result of an empirical study which was conducted using multidimensional scaling analysis. Political deviance is engagement in social interaction

that puts other individuals at a personal or political disadvantage. Behaviors such as showing favoritism, blaming co-workers, and starting negative rumors about the organization would be included in this category (Robinson & Bennett, 1995). Personal aggression is defined as behaving in an aggressive or hostile manner toward others. Examples of behaviors which fall under this definition are sexual harassment, verbal abuse and stealing from other employees (Robinson & Bennett, 1995).

<u>Antecedents and Correlates of Workplace Deviance</u>

In addition to the research which has helped to build theory in the area of workplace deviance, additional empirical research has also been conducted. Much of this literature has investigated the antecedents and correlates of different types of workplace deviance. A variety of causal models which attempt to explain each of the different types of workplace deviance have been proposed. In these models, the dependent variable may be any type of deviant workplace behavior. Some studies have aimed to predict narrowly defined deviant behaviors (e.g., theft, tardiness and absenteeism) while other studies predict multiple behaviors within a certain type of workplace deviance (e.g., production deviance, property deviance). Many of the studies have attempted to predict both production deviance and property deviance (e.g., Hollinger, 1986) and some have also included the prediction of altruistic property deviance (e.g., Hollinger et al., 1992). This section will outline four different types of variables which are related to deviant employee behavior: personal characteristics, employee perceptions and attitudes, situational and organizational factors, and integrity tests.

Personal Characteristics

Two independent variables which have consistently been found to be important in predicting workplace deviance are employee age and length of tenure. Employees who are younger and those with less tenure have been found to be more likely to engage in deviant behavior in the workplace (Hollinger, 1986; Hollinger et al., 1992).

Employee Perceptions and Attitudes

One factor which is related to deviant employee behavior involves the perceptions of employees. Employees who perceive the employer to be unfair will be more likely to engage in deviant behavior in the workplace (Hollinger, 1986; Hollinger et al., 1992). For example, if an employee feels underpaid relative to the amount which he or she contributes to the organization, the person may be more likely to engage in deviant behavior in the workplace. This idea is consistent with equity theory, especially as conceptualized by Jaques (1961). In its most basic form, this psychological theory outlines that employees want to achieve equity or a balance between their inputs (or what they are putting into the job) and their outputs (or what they are receiving back from the job). This issue of balance, in Jaques view, is judged against some standard of perceived "fairness" which is internal to the employee and is likely based on past experiences. In general, if employees feel that they are not achieving an equity status, then they are much more likely to resort to stealing money or goods from their employer or engaging in other such behaviors in order to achieve equity.

Hollinger (1986) indicates that most workplace deviance research implicitly or explicitly assumes that both production and property deviance are motivated by the

strains and inequities intrinsic to a particular formal work organization. There is research to support that perceptions of inequity "internal" to the work setting on the part of the employee can lead to a whole host of deviant behaviors in the workplace. For example, employees who perceive inequity (especially regarding pay or salary) have been shown to be more likely to steal from their employers (e.g., Altheide et al., 1978; Greenberg, 1990). The employee may feel that the employer "owes" them something, and they may well take action to receive what they feel they are "owed." Along the same theme of "fairness," research has suggested that individuals' perception of procedural justice, distributive justice, and organizational justice in the workplace may also impact deviant behavior on the part of employees (e.g., Skarlicki & Folger, 1997).

Employee attitudes can also play a role in deviant behavior in the workplace. Job satisfaction has been shown to be a predictor of both property and production deviance. If individuals are more satisfied with their work, they are less likely to engage in deviant workplace behavior (Magione & Quinn, 1975; Hollinger & Clark, 1982).

Situational and Organizational Factors

Many of the variables which have been shown to be related to deviant behavior can be characterized as situational or organizational factors. One of these factors which plays a role in deviant behavior in the workplace is whether the organization has any policies in place which may deter such behavior. The deterrence paradigm is one way in which deviance in the workplace can be viewed. For example, if employees feel that if they engage in deviant behavior, they will receive sanctions by the organization and those sanctions will be severe, then they will be less likely to engage in the deviant behavior.

Applying these ideas, some studies have included measures of perceived certainty of receiving organizational sanctions upon doing the deviant behavior, and of perceived severity of those sanctions (Hollinger & Clark, 1983). Both of these variables were found to be inversely related to employee theft. Age also interacted with each of these variables as well, such that older employees were more likely to be deterred from engaging in deviant behavior in the workplace when the level of perceived certainty and/or perceived severity was high (Hollinger & Clark, 1983).

Deviant behavior in the workplace can also be related to the system of rewards and punishments which are practiced by the organization. This idea is consistent with the behavior modification approach of psychology. With such an approach, it is assumed that employees will engage in behaviors for which positive reinforcement is received. Also, it is expected that employees will discontinue those behaviors which are not rewarded and those behaviors which are punished. If employees are not rewarded for their deviant behavior, then they may discontinue it. However, it is likely that employee who engage in deviant behaviors may receive rewards which are outside of the control of the organization, such as having extra cash when they steal from the company cash register. If this is the case, then employees may continue to engage in deviant behavior regardless of punishing actions taken by the company.

Another factor which may impact deviant behavior in the workplace is how employees learn about organizational rules and norms. A social learning perspective is one type of framework which has been proposed for understanding deviant behavior in the workplace such as aggression and violence (e.g., O'Leary-Kelly, Griffin, & Glew,

1996). Social learning theory suggests that people can learn from experiencing certain outcomes as a result of behaviors in which they have engaged. In addition, the theory suggests people can learn from the behavior and the outcomes of the behaviors of others. Therefore, employees may see other employees engaging in deviant behaviors in the workplace, and gaining some rewards (e.g., the benefit of money stolen from the employer) as a result of these behaviors. If the individuals who are engaging in the deviant behavior are not punished, other employees who are viewing the situation will learn that this could also be the case if they chose to engage in deviant behavior. If this is true, individuals who hadn't previously engaged in deviant employee behavior may chose to engage in deviant behavior.

An organization may attempt to reduce or eliminate deviant behavior in the workplace by making it clear that punishment will occur for deviance and then insuring that the punishment is actually carried out to offenders. If the organization effectively does these things, then social learning theory indicates that there will be less deviant behavior in the workplace. For example, if someone sees a fellow employee steal from the cash register, but then also sees that the employee is fired as a result, the observer is less likely to steal from the register thereafter.

Integrity Tests

In general, the field of psychology has been very involved with the prediction of workplace deviance through the field of integrity testing. These tests are typically used as a pre-employment screening device for those who are applying for a position with the organization. The aim of such tests is to "screen out" those people who would commit

acts of deviant or counterproductive behavior in the workplace.

There are two main types of integrity tests, overt tests and personality-oriented measures. Overt integrity tests typically have two sections: one which measures a person's attitudes toward theft and other counterproductive behavior, and one which specifically asks about admissions of theft and other counterproductive behavior. Personality-oriented measures are given to look at theft and at broader things such as conscientiousness etc. (Sackett, 1994).

A large meta-analysis by Ones, Viswesvaran, and Schmidt (1993) suggests that the level of validity provided by both overt and personality-oriented types of integrity tests is positive across situations.

This section has provided a brief history of the study of deviance and reviewed relevant literature. It is clear that there are a variety of antecedents and correlates of deviant workplace behavior including personal characteristics, employee perceptions and attitudes, and situational and organizational factors. In addition, the integrity testing field has been active in the prediction of deviant behavior on the part of employees. The next section will address what is known about the dimensionality or structure of deviant workplace behavior.

Dimensionality or Structure of Deviant Workplace Behavior

The literature which has been outlined does not directly address the dimensionality or structure of deviant behavior. This section will outline literature related directly to the dimensionality of deviant behavior. While research on deviant workplace behavior has advanced in the past decades, questions still remain regarding the

dimensionality of such behavior. Most of the research on deviant employee behavior in the workplace has focused on discovering the base rates of various types of deviant behavior or on attempting to predict such behavior. Few studies have explored the dimensionality or structure of deviant employee behavior. Robinson and Bennett (1995) is one empirical study which explored the dimensionality of deviant workplace behavior. Their study collected a listing of incidents from employees which were viewed by these individuals as deviant workplace behaviors. A second group of participants (N = 180) rated pairs of the behaviors with regard to how similar or different they were. Multidimensional scaling analysis was then applied to the ratings. The result of the analysis was a two-by-two matrix upon which deviant behaviors could be placed. This inductively and empirically derived typology of workplace deviance included two dimensions along which deviant behavior can vary: minor versus serious and interpersonal versus organizational. The four quadrants in the matrix were labeled as follows: production deviance, property deviance, political deviance, and personal aggression (each as defined and described earlier). Figure 1 presents the typology.

Insert Figure 1 About Here

Another study by Hunt (1996) on generic work behavior provides some further insight into the dimensionality of deviant behavior. Generic work behavior was defined as behavior which contributes to the performance of virtually any job independent of technical job roles (Hunt, 1996). The study used multidimensional scaling to examine the
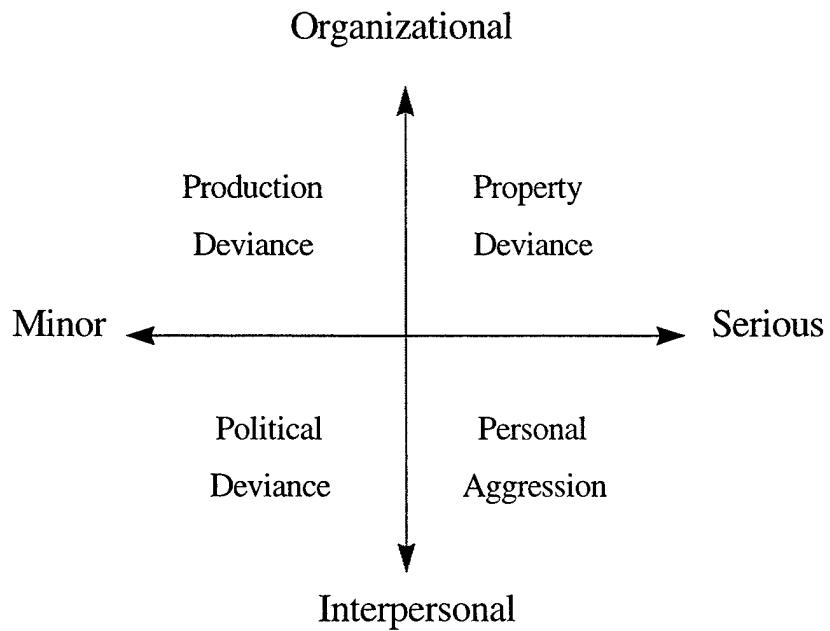
Figure 1. Robinson and Bennett (1995) Deviant Behavior Typology

relationships between various types of behaviors which are considered to be generic work behavior. Some of the behaviors which were considered in the study fall within the definition of deviant employee behavior. For example, categories such as Unruliness, Theft, and Drug Misuse were included. The category Unruliness includes behaviors such as making a mistake and blaming another employee for it and refusing to take routine orders from supervisors. The Theft category includes behaviors like failing to ring up a purchase and keeping the money and stealing small inexpensive merchandise. The Drug Misuse category includes behaviors such as drinking alcohol or taking drugs on company property and coming to work under the influence of alcohol or drugs. This study did not aim to investigate the dimensionality of deviant employee behavior, but does nevertheless give some insight into the question. The results of the study suggest that the three categories of Unruliness, Theft, and Drug Misuse may be subsumed under a single higher order dimension called "employee deviance."

These studies provide a step toward building a comprehensive theory of deviant employee behavior. However, these studies provide only two examples of potential means of addressing the dimensionality of deviant employee behavior. The multidimensional scaling analysis for Hunt (1996) was based on correlation coefficients between categories of behaviors. This study focused on a broader aspect of performance, generic work performance, so the results do not provide substantial information about the dimensionality of deviant behavior.

Robinson and Bennett (1995) is the only study which directly addresses the dimensionality question. In this study, participants were asked to assess the degree to

which various behaviors were similar. While the multidimensional scaling analysis conducted for this study provides some insight into the dimensionality of deviance, there is still much to discover about this topic. First of all, it is useful to note that when individuals were asked to rate the "similarity" of pairs of behaviors, this may have meant a variety of different things to different people. For example, some individuals may have made their rating based on the similarity of the base rate of occurrence of the two behaviors. Others may have provided a rating on the basis of the similarity in the punitiveness of sanctions for the two behaviors. Still other individuals may have rated the behaviors based on the degree to which they see each of the behaviors in the pair as ethical or morally acceptable. Yet another basis for rating the similarity of pairs of behaviors may have been the covariance of occurrence of the two behaviors at the individual level. For example, individuals may have rated the behavior pairs based on their own view of whether an individual who engages in one of the behaviors would also be likely to engage in the other behavior which is listed in the pair.

In the Robinson and Bennett (1995) study, individuals were not instructed to make their ratings specifically on any of the bases which are outlined here. Thus, it is impossible to determine the basis upon which individuals rated the pairs of behaviors. Thus, an empirical investigation which instructs participants regarding the basis of ratings would allow for a comparison of results to the Robinson and Bennett (1995) study. Perhaps the most interesting of the bases for rating the similarity of pairs of behaviors is the notion of the covariation of occurrence of the two behaviors. After all, this is likely a key issue from the employer's perspective.

Data Collection Options for Studying Deviance

In order to examine the relationships between deviant behaviors, the ideal situation would be to collect data which would reflect the true state of affairs with respect to whether individuals engage in the deviant employee behaviors which are being considered in the study. This, however, would be a difficult feat. It is difficult in any situation to assess the true state of affairs. In the case of assessing deviant employee behavior, there are four potential means of attempting to do so: 1) asking individuals if they engage in such behaviors, 2) having supervisors rate employees with regard to whether the employees engage in such behaviors, 3) collecting organizational records which document various deviant behaviors, and 4) having individuals rate the likelihood of the behaviors occurring in the workplace (e.g., a "hypothetical other" rating). Each of these potential data collection approaches will be discussed in turn.

The first option, a self-report measure, is the approach which has been taken in research which attempts to establish base rates of various types of behavior. There are potential problems with self-report measures due to the sensitive nature of the topic. Individuals will likely be reluctant to reveal that they engage in deviant behaviors if they feel that their responses will not be anonymous and confidential. If there is underreporting for this reason, then the prevalence of deviant behaviors will be underestimated. This possible problem can be partially alleviated by ensuring that the survey data will be completely anonymous and confidential.

There is also another problem with the self-report approach. Individuals who are in certain organizations and/or positions may not have the opportunity to engage in all of

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the types of deviant behaviors. The most straightforward way to study the relationships between various types of deviant behavior is to ask individuals if they have engaged in each type of deviant behavior and then conduct correlational analyses on their responses regarding the behaviors. If individuals indicate that they would be very likely to engage in each of two different behaviors, then there would be a positive relationship between the two behaviors. Conversely, if individuals indicate that they would be very likely to engage in one of the behaviors and not very likely to engage in the other behavior, then there would be a negative relationship between the two behaviors. There is a problem with this type of survey strategy, however. Individuals who work in certain organizations and/or positions may not have the opportunity to engage in all of the types of deviant behaviors. Employees who work for organizations which provide services will likely have the opportunity to engage in different deviant behaviors than those who work for organizations which produce products. For example, employees in a customer service position have the opportunity to be discourteous to customers but do not have the opportunity to sabotage the production of a product. The reverse is true for employees working on a production plant assembly line. Also, individuals in differing positions (even within an organization) may have the opportunity to engage in different deviant behaviors. For example, employees who work as check-out clerks have access to the company's cash register but employees who work in the warehouse do not.

Thus, a "lack of opportunity problem" exists. If all participants who would be surveyed do not have the opportunity to engage in all of the deviant behaviors included in the study, the responses given by individuals when asked if they have engaged in a certain

deviant behavior may be misleading. If an individual indicates that he or she has not engaged in a particular behavior, this response may be given simply because that individual has not had the opportunity to engage in the behavior.

The second approach to data collection, the supervisory ratings, also has potential problems. First of all, it is likely that if an individual has been observed engaging in a deviant behavior which is considered to be serious to the organization, that person would likely have been fired as a result of the incident. Thus, those individuals who engage in this type of behavior are likely no longer employees of the organization, and therefore cannot be observed and rated by their supervisors. In addition, there is a problem with observability. Many deviant behaviors can be covered up by the employee. It may be necessary for a supervisor to be in the presence of the employee virtually all the time on a daily basis in order to accurately assess whether an employee engages in certain deviant behaviors. Another problem with this approach is that, as discussed above, individuals may not have the opportunity to engage in all types of deviant behaviors, thus preventing them from being rated by their supervisor on these areas. Due to these problems, this approach will not allow an individual to be rated on the entire range of deviant behaviors.

The main problem with the third data collection method, using organizational records which document various deviant behaviors, is that not all behaviors have corresponding records which would be kept. Only a limited range of behavior would have organizational records to document employees engaging in them (e.g., attendance and safety violations).

The fourth data collection method, having individuals rate the likelihood of the

behaviors occurring in the workplace (e.g., a "hypothetical other" rating), would not be subject to the observability problem or the lack of opportunity problem. The main concern with using this method would be whether or not individuals' perceptions of the occurrence of the behaviors in the workplace reflect reality or not.

Thus, it is clear from the discussion above for the various possible data collection methods that there are problems which prevent assessment of the true state of affairs with regard to deviant employee behavior in the workplace. It is thus necessary to evaluate methods of overcoming some of the problems.

First of all, for the self-report measure, individuals could be asked whether they would be likely to engage in these behaviors rather than if they have engaged in them. This would allow for a rating on the entire range of behaviors. Participants would be asked to assume that they would have the opportunity to engage in all of the listed behaviors. In addition, complete anonymity could be guaranteed to participants. Stressing to participants that the data collected for the study will to be used for research purposes only and that their employer will not have access to the data would make it more likely that individuals would respond in a straightforward and honest manner.

Additional ratings beyond self-report would be desirable. With respect to the supervisory rating of employee deviant behaviors, potential lack of opportunity for employees to engage in certain behaviors is an extreme problem. In order to avoid this problem, as was suggested for the self-report measure, the rating could be done under the assumption that the individual indeed had the opportunity to engage in all of the deviant behaviors. On the deviant behaviors which employee has the opportunity to do, the rating

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would be made directly. For certain deviant behaviors on the rating which the employee does not have the opportunity to engage in their position, the supervisor would then be required to rate the employee by making the assessment if the employee would engage in this behavior if the person had the opportunity to do so. Given the awkwardness of this approach and the fact that observability would still be an issue with supervisory ratings, a different approach should be used.

If the assumption that individuals have the opportunity to engage in all of the deviant behaviors which are included in the study must be made in order to rate the entire range of behaviors, then rating a hypothetical other seems to be a possible approach. Individuals could complete a rating task which includes pairs of deviant behaviors. Participants, in effect, provide ratings according to their perceptions about the relationships between deviant behaviors. One main concern with doing this is whether or not participants' perceptions reflect reality or not. In general, when individuals make ratings of occurrence of the various behaviors in the workplace (e.g., hypothetical other ratings), the ratings will be a function of participants' implicit theory of personality or of their implicit theory of performance. An individual's implicit theory can be defined as a set of categories and their associated prototypes that is used to represent, evaluate, and predict the behavior of others (Ilgen & Feldman, 1983). Implicit theories also include the presumed relationships among these categories. It is likely that raters rely on implicit theories in order to reduce the amount of information which must be processed in an attempt to understand the behavior of others (Rush, Thomas, & Lord, 1977).

There is a vast amount of research which suggests that individuals hold such implicit theories. For example, individuals have been shown to have implicit theories of personality (Schneider, 1973), work group performance (e.g., Staw, 1975), and of instructor performance (e.g., Whitely & Doyle, 1976). A large portion of the literature on implicit theories is on implicit personality theory. Since this literature is relevant to the rating task process which will be used in the study, a brief overview of this research will be provided here.

Implicit personality theory refers to an individual's unconscious ideas or the perceptions regarding how traits are related (Borman, 1983; Schneider, 1973). In general, implicit theories include the rater's ideas about both the mean and the variance of the dimensions to be rated (Cronbach, 1955), but most research has focused on the interrelationships of rated traits.

If individuals use their implicit personality theories to rate the hypothetical other, the question arises whether individuals provide ratings which are an accurate reflection of reality. In order to address this question, some background literature must first be reviewed. Research has shown that when individuals rate the personality characteristics of others, a five-factor solution is usually obtained (Goldberg, 1993). This five-factor solution has been found to generalize across a variety of settings and designs (Borkenau, 1992). For example, the same type of solution holds when participants are varied with respect to how long and how well they know each other (Norman, 1963). Another study included individuals who had never met or interacted with each other, and ratings revealed the same structure (Passini & Norman, 1966).

These results reflect shared ideas regarding trait structure among raters in a variety of situations. This supports the existence of an implicit personality theory, or a shared expectation about how traits covary. However, this does not establish that individuals use such a theory when they rate behaviors such as the deviant employee behaviors included in the study. Krzystofiak, Cardy, and Newman (1988) directly addressed this issue. In the study, students rated the performance of hypothetical college instructors. The vignettes which described instructor performance provided only behavioral information and no trait information. The students provided both performance ratings and trait ratings based on the vignettes. Results suggest a five-factor solution for the trait ratings. Also, the results of the trait ratings showed that even though only behavioral information was given, traits were inferred by the students. Regression analyses showed that the personality ratings added significantly to the prediction of the performance ratings. This indicates that raters' implicit personality theories can affect ratings of performance.

The question remains as to whether individuals provide personality ratings which are an accurate reflection of reality. Accuracy has generally been examined in this area as the agreement between self-ratings and others ratings, or agreement between the ratings of two independent others. Much research suggests that there is generally agreement of both types. Agreement correlations of .40 and even higher have been found across a wide range of personality traits (e.g., Funder & Dobroth, 1987; Paunonen, 1989). The point must be made, however, that the research on accuracy does not substantiate that implicit personality theory reflects the latent structure of personality, as raters may agree fully but

may both be wrong (Funder & West, 1993). Thus, research supports the idea that individuals' implicit personality theories are likely provide a fairly accurate representation of personality in reality. This provides support for the use of the hypothetical other rating approach.

The Current Study

Overview

The study utilized two data collection methods, self-ratings and hypothetical other ratings. The aim of the study was to investigate the dimensionality of deviant employee behavior. Each data collection method produced a "similarity matrix" among various deviant employee behaviors and those matrices were examined to gain insight into the dimensionality of deviant employee behavior. The study aimed to determine whether the results using the two different types of data converge.

The study extends the literature in three ways. First, the study included perhaps the most comprehensive range of deviant employee behaviors used in a single study to date. Since the intent of the study was to examine the dimensionality of deviant behavior, it was desirable to use as broad a range of deviant behavior as possible. This was true because if a particular behavior was not included in the study, then the relationships between that behavior and other deviant behaviors could not be examined.

The second way the study extends the literature is by addressing the "lack of opportunity problem" which can exist when collecting self-report ratings. The current study addressed this potential problem in the self-ratings by having participants assume that they would have the opportunity to engage in each of the behaviors included in the

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survey. Individuals were asked to respond to a rating scale which focused on the likelihood that they would engage in the behavior, given the assumption that they would have the opportunity to engage in the behavior. The use of this rating scale stands in contrast to the approach used in many past studies which asked individuals whether or not they have engaged in each behavior. This new rating scale addressed the lack of opportunity problem and allowed for ratings by each participant on the entire range of behaviors.

The third way the study extends the literature rests on the adoption of a focus on the co-occurrence of behaviors through the hypothetical other rating task. If two behaviors co-occur, an individual who would likely engage in one of the two behaviors would also likely engage in the other behavior. Further, an individual who would not likely engage in one of the two behaviors would also not likely engage in the other behavior. Thus, if two behaviors co-occur, it is not expected that an individual would engage in one of the behaviors and not engage in the other behavior. Past studies have focused not on whether behaviors are likely to co-occur, but rather on whether the behaviors were "similar." For example, Robinson and Bennett (1995) asked participants to rate the "similarity" of behaviors. Given this scenario, it is not surprising that participant ratings of the behaviors appear to have been made on a basis which reflected the perceived "severity" of the behaviors. While this perspective which focuses on the severity of behaviors is useful, it is also interesting to have knowledge about the co-occurrence of the behaviors in the workplace. Organizations would find it helpful to know the extent to which various behaviors co-occur in the workplace since these

organizations commonly attempt to prevent and predict such behavior. The current study directly addressed this aspect by operationalizing "similarity" in terms of co-occurrence for the hypothetical other ratings.

This study provides insight into the structure and dimensionality of deviant employee behavior. There is a vast range of behaviors which can be considered to be deviant in the workplace and organizations make great efforts to avoid such deviant behaviors on the part of their employees. This study and future research in this area provide information on the relationships between various deviant behaviors.

A better understanding of the dimensionality of deviant employee behavior will lead to improved prediction of such behavior. If the results of the study suggest a single underlying dimension which corresponds to various types of deviant employee behavior in the workplace, this would lend support for using the same predictors when predicting various types of deviant employee behavior. Such results would suggest that the predictors which have been shown to predict certain specific deviant behaviors may be more generalizable in predicting other deviant behavior than previously thought. This would contrast the existing literature which suggests that predictors play differing roles in predicting different types of deviant employee behavior (e.g., Hollinger, 1986; Hollinger, Slora, & Terris, 1992).

Understanding the structure and dimensionality of deviant behavior will also give insight into the relationships between various deviant behavior criterion which may be used in validity studies for employment tests. Ones, Viswesvaran, and Schmidt (1993) examined the breadth of the criterion as a potential moderator of validity when predicting

counterproductive behavior criteria. Criteria were divided into "narrow criteria" (e.g., theft) and "broad criteria" (e.g., general rule-breaking behavior). Results suggest that criteria breadth may serve as a moderator to integrity test validity. The results of this study and future research will provide insight into this issue.

Understanding the dimensionality of deviant employee behavior will also lead to more effective prevention of this behavior in the workplace. If the relationships between the various deviant behaviors are known, this will allow organizations to better implement their prevention efforts. If a particular prevention strategy is effective for preventing a certain type of deviant behavior and this behavior is related to certain other behaviors the organizations wishes to prevent, this would imply that a similar prevention strategy would likely be effective.

Method

The study investigated the dimensionality of deviant employee behavior. The study included a survey which had two sections, each with a different focus. In the first section of the survey (hereafter referred to as the "self-rating"), participants were presented with an extensive list of 87 deviant behaviors which had been grouped on an a priori conceptual basis. They were asked to rate the likelihood that they would engage in each behavior. The data from this portion of the survey was used to examine whether support existed for the use of various categories of deviant behavior through alpha estimates of reliability and factor analyses. As will be presented later, empirical support was found. Thus, the relationships between the categories were examined.

In the second section of the survey (hereafter referred to as the "co-occurrence rating"), participants provided ratings on the co-occurrence of categories of deviant employee behaviors using the same conceptual categories as in the first section. This set of ratings was subjected to multidimensional scaling techniques in order to describe the relationships between various deviant employee behavior categories. Additionally, the correlation matrix formed from the ratings on the self-report section of the survey was also subjected to multidimensional scaling, which facilitated a comparison of the findings between the two methods of data collection.

Student Sample

The first sample consisted of undergraduate students. This sample was originally intended to be used to complete a pilot study to pretest the survey instrument. This pilot study was aimed at determining whether empirical support existed for the use of the content categories of deviant behavior. However, since this sample performed the same rating task which was later used in the first section of the main survey, results from the Student Sample will be presented in conjunction with the results from the main sample.

Participants were 115 undergraduate students enrolled in management classes at a large Midwestern university. Participants were recruited in class and participation was voluntary. There were no personal identifiers on the surveys and participants were assured that individual responses were completely confidential. There were no inducements or rewards given to participants for completion of the survey. The mean age of participants was 21.7 years (with a range of 19 to 43); 55% were female, and 87% were white.

Alumni Sample

The second sample consisted of alumni of a small midwestern undergraduate liberal arts institution. This sample allowed for inclusion of individuals from a wide variety of occupations and industries who were employed in a wide variety of organizations across the United States (from more than 25 states). Surveys were mailed to 1,102 alumni and were returned by 363 for a response rate of 33%. No incentives were given for completing the survey. Ten of the surveys arrived after the deadline and could not be included in the analyses. An additional ten surveys were eliminated due to incomplete data. The resulting sample size for the study was 343.

Ninety-four percent of the sample was white, 56% were female, 73% were married, and the mean age of participants was 40 years (SD=10.15). The sample was one in which the education level of participants was extremely high, with fifty-nine percent of the sample having education beyond an undergraduate degree. Ninety-four percent of the sample was employed and 73% were employed full-time[1]. Eighty-six percent of the participants were employed in managerial, technical, and professional positions. The sample had mean tenure in current job and job experience of 8.37 years (SD=8.04) and 15.5 years (SD=9.82), respectively, and a mean income of $55,400 (SD=57.39).

Survey Construction

A list of deviant employee behaviors was compiled for use in the study. The first step in the process of constructing the list was conducting a thorough review of the

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[1] Since t-tests indicated no mean differences on relevant variables between participants who were not employed, those who were employed part-time, and those who were employed full-time, all were retained in the sample.

literature. Appendix A contains a list of over 250 deviant behavior items which were obtained from the literature. The behaviors which have been used in different studies are listed separately with the reference indicated. The full citations for all studies cited in Appendix A can be found in the reference list. For each listing, the term which was used to describe the behaviors in that individual study are provided for reference.

Once the list of deviant behavior items was generated, redundant items were removed and some additional behaviors were generated. Ultimately, eighty-seven behaviors were included in the study. Five of the behaviors which were included were accidental in nature rather than intentional (e.g., Accidentally make mistakes on work tasks; Come to work late due to accidental reasons - e.g., car accident on the way to work) and thus did not fit the definition of deviant behavior used in the study. These items were included for exploratory purposes. The behavior list was then sorted into eleven separate categories of deviant behavior based on the similarity of content. The following eleven categories of behaviors were formed: 1) Theft and Related Behavior, 2) Destruction of Property, 3) Misuse of Information, 4) Misuse of Time and Resources, 5) Unsafe Behavior, 6) Poor Attendance, 7) Poor Quality Work, 8) Alcohol Use, 9) Drug Use, 10) Inappropriate Verbal Actions, and 11) Inappropriate Physical Actions. Table 2 lists all eighty-seven behaviors which were included in the survey, by category. Sixty-six of the behaviors fit into the eleven content categories and the remaining items were either accidental in nature (N=5) or dissimilar to the others in terms of content (N=16). In Table 2, these items are listed under Accidental Items and Miscellaneous Items.

The survey which was constructed included all of the eighty-seven deviant

behaviors which are listed in Table 2. Appendix B presents a copy of the survey.

Participants were asked to rate whether they would engage in each of the deviant

behaviors on a seven point scale with 1 being anchored with "No Matter What the

Circumstances, I Would Not Engage in the Behavior" and 7 being anchored with "In a

Wide Variety of Circumstances, I Would Engage in the Behavior." Individuals were

asked to respond according to the assumption that they would have the opportunity in

their workplace situation to engage in all of the listed behaviors. In addition, the wording

of the anchors on the rating scale attempted to take into account the circumstances under

which an individual would engage in various behaviors. The instructions for the survey

prompted participants to consider various circumstances when rating the items (e.g.,

working conditions, penalties or punishments for wrongdoing, unfair treatment, level of

job satisfaction).

In addition, the survey also included a section which asked participants to provide

demographic and background information. The variables collected were: age, sex, race,

education, employment status (employed or not), occupation and industry, tenure, and

amount of full-time work experience.

The survey was pilot tested on 115 undergraduates students and the second

portion of the survey was formulated based on the results of the pilot study. In order to

facilitate multidimensional scaling analysis, it is ideal for participants to rate every

possible pair of stimuli [n(n-1)/2]. The number of pairs of items could be extremely large

if the number of behaviors included in the study is large. For example, if all 87 behaviors

were used, the number of pairs to be rated would have been 3,571. Rating this many pairs

of items would be cognitively exhausting. Fatigue, errors, and participant attrition may have resulted if participants were asked to respond to all pairs of deviant employee behaviors. With this in mind, the pilot study was aimed at determining if there was empirical support for the use of a smaller set of content categories of deviant behavior. If this was found to be the case, then participants could rate pairs of categories rather than pairs of individual items. This would reduce the number of ratings to be made substantially.

In the pilot study, additive composites were formed for each of the eleven content categories. Based on the results of the pilot study which will be presented more fully later (e.g., alpha estimates of reliability for the categories), the decision was made to construct the second section of the survey to rate the co-occurrence of categories of deviant behavior rather than rating the co-occurrence of individual behaviors. This reduced the rating task from 3,571 pairs of behaviors to fifty-five pairs of behavior categories.

Insert Table 2 About Here

The second portion of the survey asked participants to rate the co-occurrence of categories of deviant behavior. This task involved the comparison of pairs of categories. The survey described co-occurrence of behaviors as follows: "If the behaviors in the two categories co-occur, employees who engage in behaviors in one of the categories would also engage in the behaviors in the other category. Further, employees who would not engage in behaviors in one of the categories would also not engage in behaviors in the

Table 2

Deviant Employee Behavior Items by Category

Category and Items	Number of Items
Theft and Related Behavior	10

    Take cash or property belonging to a co-worker.
    Take cash or property belonging to the company.
    Take office supplies from the company.
    Take petty cash from the company.
    Help another person or advise them how to take
        company property or merchandise.
    Take cash or property belonging to a customer.
    Give away goods or services for free.
    Provide goods or services at less than the price
        established by the company.
    Misuse employee discount privileges.
    Misuse business expense account.

Destruction of Property	4

    Deface, damage, or destroy property, equipment,
        or product belonging to the company.
    Deliberately sabotage the production of product
        in the company.
    Deface, damage, or destroy property belonging
        to a co-worker.
    Deface, damage, or destroy property belonging
        to a customer.

Misuse of Information	5

    Discuss confidential matters with unauthorized
        personnel within or outside the organization.
    Intentionally fail to give a supervisor or co-worker
        necessary information.
    Destroy or falsify company records or documents.
    Provide the organization with false information to
        obtain a job (i.e., regarding education or
        experience).
    Lie to employer or supervisor to cover up a mistake.

Table 2 continued

Deviant Employee Behavior Items by Category

Category and Items	Number of Items
Misuse of Time and Resources	13

Waste time on the job.
Conduct personal business during work time.
Waste company resources.
Use company resources you aren't authorized to use.
Make personal long distance calls at work.
Mail personal packages at work.
Make personal photocopies at work.
Use email for personal purposes.
Spend time on the internet for reasons not related to work.
Play computer games during work time.
Alter time card to get paid for more hours than you worked.
Take a long lunch or coffee break without approval.
Work unnecessary overtime.

Unsafe Behavior	4

Fail to read the manual outlining safety procedures.
Endanger yourself by not following safety procedures.
Endanger coworkers by not following safety procedures.
Endanger customers by not following safety procedures.

Poor Attendance	5

Use sick leave when not really sick.
Intentionally come to work late.
Leave work early without permission.
Be absent from work without a legitimate excuse.
Miss work without calling in.

Poor Quality Work	3

Intentionally do slow or sloppy work.
Intentionally do work badly or incorrectly.
Intentionally perform your job below acceptable standards.

Table 2 continued

Categories of Deviant Employee Behavior and Behavior Items

Category and Items	Number of Items
Alcohol Use	3
Engage in alcohol consumption on the job.	
Come to work under the influence of alcohol.	
Have your performance affected due to a hangover from alcohol.	
Drug Use	4
Possess or sell drugs on company property.	
Engage in drug use on the job.	
Come to work under the influence of drugs.	
Have your performance affected due to a hangover from drugs.	
Inappropriate Verbal Actions	8
Yell or shout on the job.	
Verbally abuse a co-worker.	
Verbally abuse a supervisor.	
Verbally abuse a customer.	
Use sexually explicit language in the workplace.	
Argue or fight with a co-worker.	
Argue or fight with a supervisor.	
Argue or fight with a customer.	
Inappropriate Physical Actions	7
Physically attack (e.g., pushing, shoving, hitting) a co-worker.	
Physically attack (e.g., pushing, shoving, hitting) a supervisor.	
Physically attack (e.g., pushing, shoving, hitting) a customer.	
Make unwanted sexual advances toward a subordinate.	
Make unwanted sexual advances toward a supervisor.	
Make unwanted sexual advances toward a co-worker.	
Make unwanted sexual advances toward a customer.	

Table 2 continued

Categories of Deviant Employee Behavior and Behavior Items

Category and Items	Number of Items
Accidental Items	5
Accidentally damage or destroy property, equipment or product belonging to the company.	
Accidentally damage or destroy property belonging to a coworker.	
Accidentally damage or destroy property belonging to a customer.	
Accidentally make mistakes on work tasks.	
Come to work late due to accidental reasons (e.g., car accident on the way to work)	
Miscellaneous Items	16
See employees engage in unacceptable behavior and not report it	
Spread false rumors or gossip about a co-worker.	
Spread false rumors about the company.	
Deliberately bend or break rules.	
Fake an injury to avoid work duties.	
Fake an injury to receive worker's compensation.	
Smoke in areas which are designated non-smoking.	
Disobey supervisor's instructions.	
Carry a firearm or weapon to work to intimidate others.	
Use a firearm or weapon against a supervisor.	
Use a firearm or weapon against a coworker.	
Use a firearm or weapon against a customer.	
Cover up mistakes.	
Blame coworkers for your mistakes.	
Neglect or ignore customers.	
Allow non-employees in unauthorized areas.	

other category in the pair. If the behaviors in the two categories do not co-occur, then employees who engage in behaviors in one of the categories would not engage in behaviors in the other category in the pair." Participants were given a description of the behaviors which would be included in each category and were asked to rate the co-occurrence of the pairs of categories on a seven point scale with 1 being anchored with "Very Unlikely to Co-Occur" and 7 being anchored with "Very Likely to Co-Occur." Appendix C contains the full survey for the study for the Alumni Sample. The first section of the survey is the same as the survey given to the Student Sample. The second section which rates co-occurrence was formulated from results of the pilot study using the Student Sample. Both sections of the survey were given on a computer scannable form.

In addition to the eleven categories of deviant behavior, two additional categories, Job Performance and Reporting Deviant Behavior, were included in the co-occurrence rating section for exploratory purposes. Job Performance reflected overall job performance and Reporting Deviant Behavior reflected seeing employees engage in unacceptable behavior and not reporting it. Participants rated the co-occurrence of these two categories with respect to all other deviant behavior categories.

The decision to include the Reporting Deviant Behavior category was based on pilot study results which suggested that the correlational pattern of one item, "See employees engage in unacceptable behavior and not report it," was particularly notable. This item had little correlation with the majority of other deviant behaviors and seemed to separate off on its own in the exploratory factor analysis. It was thought that this item may have tapped something somewhat different than other deviant behavior items.

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Analysis

General item-level analyses (i.e., descriptives, frequencies, and correlations) and an examination of the alpha estimates of reliability and factor analyses (both LISREL and Principal Components analysis) were conducted using the data from the self ratings. Further, the relationships between the categories of deviant behavior were explored.

Multidimensional scaling (MDS) analysis was conducted on both the self ratings and the co-occurrence ratings. This technique is useful for exploring the relationships between items, in this case, the deviant employee behavior categories. This allowed for a comparison of the results for the two data collection methods.

Results

Self Ratings

For the self rating data, results will be presented for individual item level analysis, reliability analysis, and LISREL analysis. The individual item level results are presented mainly for descriptive purposes while the reliability and LISREL analysis results are aimed at examining whether empirical support exists for the use of various content categories of deviant behavior.

Individual Item Analysis

Table 3 presents the mean responses and standard deviations for all individual deviant behavior items for both samples. The means are arranged in order of descending means based on the means from the Student Sample. The mean responses ranged from 1 to 4.7 on the seven point scale and most items had means of less than 3. Since participants rated the items on a seven point scale with 1 being anchored with "No Matter

What the Circumstances, I Would Not Engage in the Behavior" and 7 being anchored

with "In a Wide Variety of Circumstances, I Would Engage in the Behavior," these

means indicate that, on average, participants reported that they are not very likely to

engage in most of the behaviors included on the survey. This result is not surprising given

the nature of the behaviors being rated. The base rate for many of the items included in

the survey would be low. In addition, there is also the potential for participants to

underestimate the likelihood that they would engage in such behaviors. Thus, relatively

low means are to be expected for the behavior items.

Insert Table 3 About Here

In Table 3, when the means for the items are compared across the two samples, it

is clear that they differ little. In fact, when the means were compared across the two

samples, the correlation between the individual item means was .95. In addition, the

standard deviations differed little across the two samples. The correlation between the

individual item standard deviations for the two samples was .92. These findings are

striking given how different the two samples are in terms of age as well as work and life

experience. One might expect individuals in the young, undergraduate student sample to

potentially be more likely to engage in various behaviors such as alcohol or drug use or

some of the behaviors related to the use of time and resources (e.g., Use internet for non-

work purposes, Waste time at work). This was not the case, however.

Table 3

Descriptives for all Deviant Behavior Items[1]

	Student Sample		Alumni Sample	
Item	Mean	SD	Mean	SD
Accidentally Come to Work Late	4.47	1.89	4.35	1.97
Use Email for Personal Purposes	4.46	1.78	4.66	2.17
Make Personal Copies at Work	3.81	1.73	4.28	1.95
Make Mistakes on Work Tasks	3.76	1.69	3.39	1.83
Failure to Read Safety Manual	3.75	1.59	3.28	1.66
Use Sick Leave When Not Sick	3.70	1.79	2.70	1.80
Use Internet for Non-Work Purposes	3.56	1.68	3.47	1.99
Cover Up Mistakes	3.49	1.58	2.71	1.48
Argue or Fight With a Coworker	3.21	1.39	2.89	1.41
Not Report Unacceptable Employee Behavior	3.10	1.31	3.09	1.50
Take Long Lunch or Coffee Break	3.08	1.74	3.12	1.98
Personal Business On the Job	3.08	1.56	3.41	1.80
Waste Time On the Job	3.07	1.35	2.89	1.49
Take Office Supplies	2.92	1.65	2.76	1.65
Misuse Employee Discount	2.85	1.60	1.82	1.23
Bend or Break Rules	2.85	1.36	3.01	1.64
Play Computer Games at Work	2.72	1.77	2.14	1.58
Give Away Goods or Services	2.66	1.42	2.97	1.82
Work Unnecessary Overtime	2.66	1.57	2.02	1.47

[1] Items arranged in order of descending means for the Student Sample.
Note: all items were rated on a seven-point scale with 7 being the most likely to engage in the behavior.

Table 3 continued

Descriptives for all Deviant Behavior Items[1]

	Student Sample		Alumni Sample	
Item	Mean	SD	Mean	SD
Accidentally Damage Company Property	2.60	1.47	2.38	1.47
Endanger Self by Not Following Safety Procedures	2.41	1.59	1.94	1.15
Unauthorized Resource Use	2.38	1.24	2.08	1.26
Leave Work Early Without Permission	2.36	1.46	2.59	1.77
Allow Non-employees in Unauthorized Areas	2.35	1.34	1.85	1.17
Make Personal Long Distance Calls at Work	2.34	1.66	2.86	1.85
Mail Personal Packages	2.29	1.60	2.21	1.70
Accidentally Damage Coworker Property	2.29	1.30	2.24	1.44
Argue or Fight with a Supervisor	2.26	1.26	2.28	1.38
Disobey Supervisor Instructions	2.26	1.09	2.38	1.26
Waste Company Resources	2.25	1.09	1.93	1.07
Have Performance Affected by Alcohol Hangover	2.24	1.48	1.48	0.91
Reduce Price on Goods or Services	2.19	1.30	1.89	1.39
Be Absent Without Legitimate Excuse	2.19	1.31	1.87	1.30
Discuss Confidential Matters	2.13	1.07	2.06	1.29
Lie to Employer or Supervisor	2.10	1.18	1.68	0.93
Yell/Shout On the Job	2.08	1.28	1.91	1.06
Accidentally Damage Customer Property	1.94	1.26	2.18	1.40

[1] Items arranged in order of descending means for the Student Sample.
Note: all items were rated on a seven-point scale with 7 being the most likely to engage in the behavior.

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Table 3 continued

Descriptives for all Deviant Behavior Items[1]

Item	Student Sample		Alumni Sample	
	Mean	SD	Mean	SD
Alter Time Card to Get Paid for More Hours	1.93	1.42	1.41	0.88
Intentionally Do Slow or Sloppy Work	1.84	0.92	1.51	0.88
Use Sexually Explicit Language in the Workplace	1.83	1.26	1.84	1.28
Come to Work Late Intentionally	1.82	1.26	1.86	1.32
Failure to Give Information	1.79	0.93	1.57	0.93
Blame Coworkers for Your Mistakes	1.74	0.92	1.52	0.84
Neglect or Ignore Customers	1.72	0.96	1.72	0.87
Provide False Information to Employer	1.68	1.29	1.20	0.51
Take Property From Company	1.68	1.07	1.66	1.12
Endanger Coworker by Not Following Safety Proc.	1.63	0.84	1.34	0.65
Intentionally Perform Below Acceptable Standards	1.60	0.88	1.34	0.76
Misuse Expense Account	1.60	0.93	1.55	0.99
Argue or Fight with a Customer	1.60	0.96	1.65	0.96
Spread False Rumors about a Coworker	1.60	1.02	1.53	0.90
Verbally Abuse a Coworker	1.52	0.87	1.41	0.84
Endanger Customer by Not Following Safety Proc.	1.50	0.78	1.31	0.62
Fake Injury to Work Duties	1.43	0.75	1.17	0.54
Destroy or Falsify Company Records	1.43	0.99	1.34	0.68
Intentionally Do Work Badly or Incorrectly	1.42	0.76	1.24	0.63

[1] Items arranged in order of descending means for the Student Sample.
Note: all items were rated on a seven-point scale with 7 being the most likely to engage in the behavior.

Table 3 continued

Descriptives for all Deviant Behavior Items[1]

Item	Student Sample		Alumni Sample	
	Mean	SD	Mean	SD
Spread False Rumors about the Company	1.41	0.80	1.28	0.68
Help Another Steal From Company	1.39	1.03	1.15	0.52
Verbally Abuse a Customer	1.37	0.78	1.29	0.65
Miss Work Without Calling In	1.36	0.84	1.25	0.69
Alcohol Use on the Job	1.34	0.93	1.44	1.06
Damage Company Property	1.31	0.72	1.17	0.47
Verbally Abuse a Supervisor	1.29	0.70	1.27	0.72
Smoke in Non-smoking Areas	1.26	0.93	1.12	0.59
Sabotage Production	1.21	0.59	1.09	0.44
Physically Attack a Coworker	1.19	0.48	1.11	0.33
Have Performance Affected by Drug Hangover	1.18	0.59	1.07	0.33
Take Petty Cash	1.17	0.56	1.15	0.55
Unwanted Sexual Advances Toward a Customer	1.15	0.50	1.07	0.28
Come to Work Under Influence of Drugs	1.15	0.69	1.04	0.22
Unwanted Sexual Advance Toward a Subordinate	1.13	0.47	1.11	0.49
Physically Attack a Customer	1.13	0.63	1.04	0.20
Damage Coworker Property	1.13	0.45	1.10	0.39
Unwanted Sexual Advances Toward a Coworker	1.12	0.46	1.10	0.44

[1] Items arranged in order of descending means for the Student Sample.
Note: all items were rated on a seven-point scale with 7 being the most likely to engage in the behavior.

Table 3 continued

Descriptives for all Deviant Behavior Items[1]

	Student Sample		Alumni Sample	
Item	Mean	SD	Mean	SD
Come to Work Under Influence of Alcohol	1.12	0.48	1.11	0.49
Damage Customer Property	1.10	0.36	1.07	0.29
Fake Injury to Receive Worker's Compensation	1.10	0.32	1.03	0.17
Possess or Sell Drugs on Company Property	1.10	0.65	1.02	0.15
Physically Attack a Supervisor	1.09	0.31	1.06	0.27
Drug Use on the Job	1.09	0.45	1.03	0.16
Take Property From Coworker	1.06	0.27	1.06	0.30
Use a Weapon Against a Supervisor	1.04	0.47	1.01	0.12
Use a Weapon Against a Coworker	1.04	0.47	1.02	0.15
Carry a Weapon to Work	1.04	0.31	1.01	0.09
Take Property From Customer	1.04	0.24	1.06	0.27
Unwanted Sexual Advances Toward a Supervisor	1.04	0.20	1.07	0.36
Use a Weapon Against a Customer	1.00	0.00	1.02	0.20

[1] Items arranged in order of descending means for the Student Sample.
Note: all items were rated on a seven-point scale with 7 being the most likely to engage in the behavior.

Item level correlational analysis revealed that, in general, the individual deviant behaviors were positively related. There were no significant negative correlations. The general pattern of positive correlations between the deviant behaviors indicates that as the likelihood that an individual will engage in one type of deviant behavior increases, the likelihood of the individual to engage in another type of deviant behavior also increases. Further, the lack of significant negative correlations between the deviant behavior items suggests that it is not the case that if an individual would be more likely to engage in one type of behavior that the individual would be less likely to engage in another type of deviant behavior. As expected, the items within a category were more highly related than items across categories.

The behavior item "See employees engage in unacceptable behavior and not report it" did not display the same pattern of correlations as it had in the pilot study. The item seemed to be correlated with most of the other deviant behavior items.

The items in the Miscellaneous items category in Table 2 did not differ from the items in the deviant behavior categories in terms of means, standard deviations, or correlational pattern. These items were, however, excluded from further analyses since they did not fit into any of the content categories.

With the exception of items which asked about the use of weapons, the items demonstrated sufficient variance in the responses. For the items involving weapons, virtually all participants indicated that they would not likely engage in these behaviors. Thus, these items were excluded from all analyses.

The frequency distributions of responses to the items showed that there were behaviors which most of the sample endorsed as ones in which they would be quite likely to engage. Participants more commonly endorsed these behaviors as ones in which they would engage when compared with other included behaviors (i.e., a higher percentage of participant responses reflected the extreme top end of the rating scale). Behaviors such as "Use email for personal purposes," "Make personal photocopies at work," "Use internet for non-work purposes," and "Use sick leave when not really sick" were endorsed by participants in this way.

Some of the behaviors included in the survey could be aimed toward different targets. For these behaviors, separate items were included on the survey for these behaviors to reflect the different targets. The correlations between the items which reflected the same behavior with different targets of the behavior were generally quite high (most were > .4), suggesting that participant ratings did not differ to a large extent across the various targets. This indicates that, for example, if an individual would likely take property from the organization, the same individual would also likely take property from a coworker.

Reliability Analysis

In order to determine if there was empirical support for the use of a smaller set of content categories of deviant behavior, alpha estimates of reliability and results of factor analyses were examined. Table 4 presents the alpha estimates of reliability for each of the deviant behavior category composites for both samples. For the Student Sample, most of the alpha estimates of reliability for the deviant behavior categories are in the .7 to .8

range, with the exception of the Alcohol Use category which has an alpha estimate of .65. For the Alumni Sample, the alpha estimates of reliability for the deviant behavior categories are also in the .7 to .8 range, with the exception of Destruction of Property and Alcohol Use which have alpha estimates of .66 and .59, respectively. Taken together, these alpha estimates of reliability for the deviant behavior categories provide preliminary support for the use of the eleven categories. There is some concern over the lower alpha estimates for the Alcohol Use category for both samples, however. Also, it is not clear why the alpha estimate of reliability for the Destruction of Property composite is much lower for the Alumni Sample than for the Student Sample (.66 versus .82). Reliability analysis examining the level of alpha if each item were omitted indicated that the alpha level would be considerably lower if any of the items in this composite were omitted.

Insert Table 4 About Here

LISREL Analysis

Confirmatory factor analyses were conducted using LISREL. Participants indicated that they would not be likely to engage in most of the deviant behavior which were included in the study by providing ratings which were on the low end of the seven point rating scale. The behavior items also did not have an extreme amount of variance. This is not surprising given the nature of the items. It is likely that the base rate of many of the behaviors is low and it is expected that there would not be a large percentage of individuals who would indicate that they would engage in the behaviors. However, the

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Table 4

Alpha Estimates of Reliability for Deviant Behavior Categories

		Alpha Estimates of Reliability	
Category	# Items	Student Sample	Alumni Sample
Theft and Related Behavior	10	.78	.77
Destruction of Property	4	.82	.66
Misuse of Information	5	.75	.71
Misuse of Time and Resources	13	.91	.90
Unsafe Behavior	4	.73	.71
Poor Attendance	5	.75	.77
Poor Quality Work	3	.74	.86
Alcohol Use	3	.65	.59
Drug Use	4	.88	.71
Inappropriate Verbal Actions	8	.82	.82
Inappropriate Physical Actions	7	.79	.82

skewness of the variables can potentially cause problems in the LISREL analyses. The presence of nonnormal variables can affect tests of statistical significance (Bollen, 1989). The skewness and kurtosis thresholds recommended by Curran, West, & Finch (1996) were surpassed for a large percentage of the variables in the dataset. One way to handle this issue is to find transformations for the variables that lead them to better approximate multinormality (Bollen, 1989). The PRELIS program includes a routine which identifies appropriate transformations for the affected variables and recomputes the covariance matrix for input into LISREL based on the transformations. Therefore, the data was run through PRELIS using this option prior to the LISREL analysis.

The first model that was run in LISREL was a single factor model which specified that all 66 of the items which fit into the content categories would load on a single deviant behavior factor. This model produced an extremely poor fit. The Goodness of Fit (GFI) index was .50, the Adjusted Goodness of Fit (AGFI) was .46, the Standardized Root Mean Square Residual (SRMR) .093, and the Root Mean Square Error of Approximation (RMSEA) was .12. The fit of an eleven factor model was better with goodness of fit statistics as follows: The GFI was .64, the AGFI was .61, the SRMR was .083, and the RMSEA .077. Based on knowledge that the LISREL program functions best when there are only a few items or scales specified to load on each factor, analysis specifying the eleven factor model was run using three representative items per factor (items were chosen based on exploratory factor analysis). This produced a much better fit. All of the maximum likelihood estimates for the paths were significant (p< .01). Table 8 presents the standardized maximum likelihood estimates. Though the fit of this model

was better, the fit was moderate, at best. The GFI was 0.85, the AGFI was 0.81 the

RMSEA was 0.059, and the SRMR was.057.

Insert Table 5 About Here

Despite the moderate fit of the eleven factor model, analyses were conducted to

explore the relationships between the deviant behavior categories. While there were

predicted patterns of how behavior items would be related to one another such that it was

expected that behavior items within the content categories would be more highly related

than behavior items across content categories, no predictions were made about the

relationships between the deviant behavior categories.

<u>Analysis Using Deviant Employee Behavior Categories</u>

      <u>Descriptive and Correlational Analysis</u>

Tables 6 and 7 present descriptive statistics and the correlation matrix for all

variables of interest for both samples, respectively. Deviant behavior variables are

presented at the composite level rather than the item level due to the large number of

items. Reliabilitiesare indicated on the diagonal when available.

Insert Tables 6 and 7 About Here

For both samples, most of the background and demographic variables were

relatively uncorrelated with the categories of deviant behavior, with the exception of age

Table 5

LISREL Standardized Estimates for Deviant Employee Behavior Items

Item	Factor										
	1	2	3	4	5	6	7	8	9	10	11
Take cash or property belonging to the company.	.58										
Help another person or advise them how to take company property or merchandise.	.69										
Misuse business expense account.	.52										
Deface, damage, or destroy property, equipment, or product belonging to the company.		.64									
Deface, damage, or destroy property belonging to a co-worker.		.73									
Deface, damage, or destroy property belonging to a customer.		.72									
Discuss confidential matters with unauthorized personnel within or outside the organization.			.58								
Intentionally fail to give a supervisor or co-worker necessary information.			.64								
Destroy or falsify company records or documents.			.79								

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Table 5 continued

LISREL Standardized Estimates for Deviant Employee Behavior Items

Item	Factor										
	1	2	3	4	5	6	7	8	9	10	11
Conduct personal business during work time.				.76							
Spend time on the internet for reasons not related to work.				.64							
Take a long lunch or coffee break without approval.				.79							
Endanger yourself by not following safety procedures.					.86						
Endanger coworkers by not following safety procedures.					.88						
Endanger customers by not following safety procedures.				.	.56						
Use sick leave when not really sick.						.69					
Intentionally come to work late.						.76					
Be absent from work without a legitimate excuse.						.78					
Intentionally do slow or sloppy work.							.79				
Intentionally do work badly or incorrectly.							.84				
Intentionally perform your job below acceptable standards.							.89				

Table 5 continued

LISREL Standardized Estimates for Deviant Employee Behavior Items

					Factor						
Item	1	2	3	4	5	6	7	8	9	10	11
Engage in alcohol consumption on the job.								.50			
Come to work under the influence of alcohol.								.76			
Have your performance affected due to a hangover from alcohol.								.68			
Possess or sell drugs on company property.									.71		
Engage in drug use on the job.									.93		
Come to work under the influence of drugs.									.73		
Yell or shout on the job.										.48	
Verbally abuse a customer.										.55	
Argue or fight with a co-worker.										.64	
Physically attack (e.g., pushing, shoving, hitting) a co-worker.											.79
Physically attack (e.g., pushing, shoving, hitting) a supervisor.											.57
Physically attack (e.g., pushing, shoving, hitting) a customer.											.78

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Table 6

Student Sample Descriptives and Intercorrelations for All Variables

Variable	Mean[1]	SD	1	2	3	4	5	6	7	8
1. Theft	1.85	0.63	(.78)							
2. Property	1.19	0.44	.37**	(.82)						
3. Informat	1.82	0.78	.66***	.51**	(.75)					
4. Timereso	2.89	1.08	.77***	.39***	.65***	(.91)				
5. Safety	2.31	0.92	.50***	.32***	.42***	.46**	(.73)			
6. Attend	2.28	0.97	.45***	.18	.42***	.72***	.28**	(.75)		
7. Workqual	1.62	0.69	.51**	.54***	.48***	.56***	.35**	.49**	(.74)	
8. Alcohol	1.56	0.80	.29***	.37***	.33***	.32***	.44***	.09	.22*	(.65)
9. Drug	1.12	0.52	.11	.55***	.43***	.09	.33***	-.04	.18	.47**
10. Verbal	1.89	0.70	.46**	.41**	.60***	.57***	.56***	.41**	.44***	.44**
11. Physical	1.12	0.30	.34***	.66**	.53***	.41**	.39***	.19*	.34***	.51**
12. Gender	0.45	0.50	.16	.00	.13	.11	.13	.00	.05	.12
13. Age	21.72	3.53	-.19*	.05	-.10	-.14	-.12	-.08	-.07	-.10
14. Educ.	2.76	0.93	-.23*	-.13	-.17	-.12	-.06	-.12	-.19	.06
15. Employed	0.79	0.41	.03	.02	.06	.10	.04	.10	-.10	-.05
16. Tenure	17.52	18.37	-.17	.13	-.08	-.15	-.01	-.19	-.13	-.06
17. Hrs/Wk.	21.53	9.46	.03	.09	.11	-.03	-.04	.03	.01	.03
18. Work Exp	2.02	4.19	-.05	.03	-.04	-.03	-.07	-.02	-.02	-.11
19. GPA	3.54	0.27	.18	.20	.08	.03	-.04	.00	.22	-.13

[1] For comparability, the means for the category composites reflect the mean per item. Therefore, the means reflect the mean for the category divided by the number of items in the category.

Note. Sample sizes range from N = 112 to N = 115 due to missing data. Alpha estimates of reliability are indicated along the diagonal when available. Variable key available at the bottom of the table on the following page. * = p < .05. ** = p < .01.

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Table 6 continued

Student Sample Descriptives and Intercorrelations for All Variables

Variable	9	10	11	12	13	14	15	16	17	18
9. Drug	(.88)									
10. Verbal	.38**	(.82)								
11. Physical	.61**	.61**	(.79)							
12. Gender	-.07	.23*	.05							
13. Age	.09	-.06	.02	-.02						
14. Educ.	.03	.01	.01	-.00	.28**					
15. Employed	.05	.05	.11	-.01	.10	-.07				
16. Tenure	.14	.00	.14	.02	.32**	.21	--a			
17. Hrs/Wk.	.17	.03	.08	-.05	.09	.24*	--a	.17		
18. Work Exp	.07	-.02	.04	.03	.80**	.03	.03	.44**	.11	
19. GPA	-.29*	-.05	-.06	-.01	-.26*	-.37**	-.10	-.09	-.32*	-.25

a Correlation cannot be computed because all individuals in the sample are employed. Therefore, the employment status variable is constant.

Note. Sample sizes range from N = 318 to N = 343 due to missing data. Alpha estimates of reliability are indicated in parentheses when available. For variables 1 through 11, the deviant behavior categories, Theft = Theft and Related Behavior; Property = Destruction of Property; Informat = Misuse of Information; Timereso = Misuse of Time and Resources; Safety = Unsafe Behavior; Attend = Poor Attendance; Workqual = Poor Quality Work; Alcohol = Alcohol Use; Drugs = Drug Use; Verbal = Inappropriate Verbal Actions; Physical = Inappropriate Physical Actions. Gender was a dichotomous variable which was coded as follows: 0 = female and 1 = male. Education represents the number of years of college completed. Employed was a dichotomous variable which was coded as follows: 0 = not employed and 1 = employed. Tenure in current job was measured in months and work experience was measured in years. Hrs/Wk. represents the number of hours worked per week. GPA was measured on a four point scale. p< 05. ** = p < .01.

Table 7

Alumni Sample Descriptives and Intercorrelations for All Variables

Variable	Mean[1]	SD	1	2	3	4	5	6	7	8	9	10
1. Theft	1.71	0.64	(.77)									
2. Property	1.11	0.29	.47**	(.66)								
3. Informat	1.57	0.62	.71**	.55**	(.71)							
4. Timereso	2.81	1.13	.74**	.43**	.71**	(.90)						
5. Safety	1.97	0.81	.46**	.35**	.57**	.48**	(.71)					
6. Attend	2.06	1.04	.63**	.38**	.64**	.76**	.37**	(.77)				
7. Workqual	1.37	0.68	.55**	.51**	.64**	.50**	.33**	.53**	(.86)			
8. Alcohol	1.35	0.63	.38**	.30**	.35**	.40**	.33**	.29**	.20**	(.59)		
9. Drugs	1.04	0.17	.27**	.44**	.29**	.21**	.17**	.27**	.38**	.28**	(.71)	
10. Verbal	1.83	0.72	.55**	.52**	.57**	.54**	.47**	.47**	.42**	.39**	.27**	(.82)
11. Physical	1.08	0.24	.42**	.59**	.42**	.36**	.24**	.31**	.26**	.29**	.38**	.43**
12. Gender	1.44	0.50	.07	.18**	-.01	.00	.07	-.06	-.02	.12**	.06	.12*
13. Age	39.77	10.15	-.15**	-.05	-.18**	-.30**	-.08	-.24**	-.12*	-.04	-.09	-.08
14. Married	0.73	0.45	-.04	-.03	-.07	-.13*	.07	-.04	-.11*	-.00	-.02	-.04
15. Educ.	17.74	2.05	-.02	-.06	-.14*	-.07	-.07	-.06	-.03	-.01	.03	-.09
16. Employed	0.93	0.25	.10	.06	.06	.13*	.08	.08	.04	.02	.05	.07
17. Orgtype	0.47	0.50	.08	.08	.07	.15**	.00	.07	.06	.07	-.05	.04
18. Tenure	8.36	8.09	-.08	.00	-.09	-.15**	-.10	-.10	-.06	-.04	-.04	.03
19. Hrs/Wk.	42.01	12.06	-.06	.03	-.10	-.04	-.08	-.10	-.06	-.03	-.04	-.03
20. Work Exp	15.50	9.82	-.13*	-.02	-.19**	-.27**	-.05	-.24**	-.14**	-.02	-.07	-.04
21. Income	55.38	57.39	.01	-.03	-.09	.01	-.03	.01	-.13*	-.02	-.06	-.01

[1] For comparability, the means for the category composites reflect the mean per item.
Alpha estimates of reliability are indicated along the diagonal when available. Variable key available at the bottom of the table on the following page. * = p < .05. ** = p < .01.

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Table 7 continued
Alumni Sample Descriptives and Intercorrelations for All Variables

Variable	11	12	13	14	15	16	17	18	19	20
11. Physical	(.82)									
12. Gender	.15**									
13. Age	-.11*	.24**								
14. Married	-.09	.12*	.27**							
15. Educ.	-.09	.12*	.12*	-.11						
16. Employed	.08	.12*	-.02	.04	-.09					
17. Orgtype	.08	.11*	.00	-.02	-.56**	.11				
18. Tenure	-.03	.26**	.57**	.22**	-.07	-.11	.02			
19. Hrs/Wk.	.04	.34**	.03	-.07	-.17**	.31**	.13*	.20**		
20. Work Exp.	-.07	.35**	.86**	.24**	-.11	.01	.04	.56**	.21**	
21. Income	.05	.26**	.31**	.17**	-.23**	.11	.24**	.22**	.30**	.35**

Note. Sample sizes range from $N = 318$ to $N = 343$ due to missing data. Alpha estimates of reliability are indicated in parentheses when available. For variables 1 through 11, the deviant behavior categories, Theft = Theft and Related Behavior; Property = Destruction of Property; Informat = Misuse of Information; Timereso = Misuse of Time and Resources; Safety = Unsafe Behavior; Attend = Poor Attendance; Workqual = Poor Quality Work; Alcohol = Alcohol Use; Drugs = Drug Use; Verbal = Inappropriate Verbal Actions; Physical = Inappropriate Physical Actions. Gender was a dichotomous variable which was coded as follows: 0 = female and 1 = male. Married was a dichotomous variable which was coded as follows: 1 = married and 0 = not married. Education represents the total years of education. Employed was a dichotomous variable which was coded as follows: 0 = not employed and 1 = employed. Orgtype represents the type of organization employed in and was coded as follows: 0 = non-profit and 1 = for profit. Tenure and work experience were measured in years. Hrs/Wk. represents the number of hours worked per week. Income was measured in dollars.
* = $p < .05$. ** = $p < .01$.

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and work experience for the Alumni Sample. For this sample, there are significant negative relationships between age and six of the eleven categories of deviant behavior. This indicates a trend of older individuals being less likely to engage in these types of deviant behavior. In general, this result is not unexpected given the results of past research which suggest that older individuals are less likely to engage in deviant behavior in the workplace (e.g., Hollinger & Clark, 1983b). It is, however, interesting to note that many of the past studies which found this result were conducted on samples which were considerable younger and had considerably less range in age than the current sample. Many of these studies were conducted using samples from retail organizations (e.g., fast food restaurants) which employ many young people. However, the negative relationship between age and deviant behavior still seems to hold in this sample where the mean age is 40 years old. Work experience has a similar negative relationship with the deviant behavior categories for the Alumni Sample. This is not surprising given the correlation of .86 between age and work experience. For the Student Sample, the correlations between age and work experience and the deviant behavior categories are near zero or negative and not significant. The correlations are likely not significant in this sample due to little variance in age and work experience.

For both samples, the correlations between the deviant behavior categories are generally positive and significant at the p< .01 level, with the exception of a few of the correlations involving Poor Attendance, Alcohol Use and Drug Use for the Student Sample. The correlations between categories which were not significant for the Student Sample were all significant for the Alumni Sample. These specific correlations were

some of the lowest correlations in the matrix for the Alumni Sample, which likely means that the correlations simply did not reach significance for the smaller Student Sample (N = 115).

It was not the case that all of the categories were highly correlated and undifferentiated from one another. In fact, there was a substantial difference in the level of correlation among categories. The correlations between the categories ranged from -.04 to .77 for the Student Sample and .17 to .76 for the Alumni Sample. There were no significant negative correlations between categories for either sample. The highest correlations between categories for both samples were between Theft and Related Behavior and Misuse of Time and Resources, and Misuse of Time and Resources and Poor Attendance. It follows that theft type behaviors would be highly related to the misuse of time and resources since misuse of time and resources can in a way be viewed as a theft of sorts. If an employee is wasting time on the job rather than doing job tasks, this is, in essence, a theft of time. Further, misuse of resources could also be construed as a type of theft if one considers behaviors such as the use of internet for personal purposes, the making of personal photocopies and long distance phone calls, and the mailing of personal packages at work. Misuse of Time and Resources and Poor Attendance are also highly related. Those individuals who have poor attendance (e.g., Intentionally come to work late, Leave work early without permission, Be absent from work without a legitimate excuse) are likely at the same time misusing time and resources in their jobs as a result of not being at work, leaving early or coming to work late.

Table 8 presents the means for each of the deviant behavior category composites

for both samples. For comparability, the means for the category composites which are presented are the mean per item. The pattern and level of the means is very similar across the two samples as the means correlate .98 with one another.

Insert Table 8 About Here

The highest means are for Misuse of Time and Resources, Unsafe Behavior, and Poor Attendance. These categories contain the items which were more highly endorsed as behaviors in which participants reported being likely to engage. The Misuse of Time and Resources category includes many of the items previously discussed with greater frequencies of higher ratings (e.g., Use email for personal use, Making personal photocopies at work). These things may be viewed as more of a perk of the job rather than as deviant behaviors. The behaviors included in the other two categories, Unsafe Behavior and Poor Attendance, are possibly just viewed as less severe by participants and are rated accordingly. It is also possible that even though these behaviors are intentional, they are more passive actions which may be viewed as less serious (e.g., Fail to read the manual outlining safety procedures, Endanger yourself by not following safety procedures, Leave work early without permission, Be absent from work without a legitimate excuse). It may be for this reason that participants rate them as behaviors in which they are more likely to engage.

The lowest means for the deviant behavior categories are those for Destruction of Property, Drug Use, and Inappropriate Physical Actions. On average, participants

Table 8

Descriptives for Deviant Behavior Categories

Category	# Items	Means of Additive Composites[1]	
		Student Sample	Alumni Sample
Theft and Related Behavior	10	1.85	1.71
Destruction of Property	4	1.19	1.11
Misuse of Information	5	1.82	1.57
Misuse of Time and Resources	13	2.89	2.81
Unsafe Behavior	4	2.31	1.97
Poor Attendance	5	2.28	2.06
Poor Quality Work	3	1.62	1.37
Alcohol Use	3	1.56	1.35
Drug Use	4	1.12	1.04
Inappropriate Verbal Actions	8	1.89	1.83
Inappropriate Physical Actions	7	1.12	1.08

[1] For comparability, the means for the category composites reflect the mean per item.

indicated that they would be less likely to engage in the behaviors in these categories when compared to behaviors in the categories with higher means. It is possible that the behaviors which are included in the categories are viewed as more severe or serious and are rated accordingly. For example, the Destruction of Property category contains an item related to sabotaging production and the Inappropriate Physical Actions contains items related to unwanted sexual advances and physical attack. The base rate of such behaviors is low, so it would be expected that most individuals would report not expecting to engage in such behaviors, thus yielding low item means for the individual items and therefore low means for these categories.

Principal Components Analysis

Principal components analysis using an oblique rotation was conducted on the categories of behaviors for both samples. For both samples, results suggest either a one- and two-factor solution depending on the interpretation of the scree plots. Tables 9 and 10 present results for both the one- and two-factor solutions for the Student Sample and the Alumni Sample, respectively. For the Student Sample, as presented in Table 9, the first factor has an eigenvalue of 5.17 and accounts for 47 percent of the variance, while the second factor has an eigenvalue of 1.67 and accounts for 15 percent of the variance. In general, all of the categories load quite highly on the first factor. The two-factor solution, however, does not produce factors which can be clearly defined in terms of content. There are no themes among the categories which load together on a particular factor.

Insert Tables 9 and 10 About Here

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Table 9

Student Sample Factor Loadings for Principal Components Analysis of Deviant Behavior Categories

One Factor Solution		Two Factor Solution		
Category	Factor Loading	Category	Factor 1 Loading	Factor 2 Loading
Misuse of Time and Resources	.83	Misuse of Time and Resources	.91	.00
Inappropriate Verbal Actions	.79	Poor Attendance	.85	-.21
Misuse of Information	.78	Theft and Related Behavior	.82	.03
Theft and Related Behavior	.77	Poor Quality Work	.76	-.02
Unsafe Behavior	.68	Misuse of Information	.66	.26
Poor Quality Work	.68	Destruction of Property	.51	.34
Inappropriate Physical Actions	.68			
Destruction of Property	.65	Drug Use	-.26	.87
Poor Attendance	.62	Alcohol Use	.02	.78
Alcohol Use	.57	Inappropriate Physical Actions	.19	.71
Drug Use	.39	Inappropriate Verbal Actions	.46	.53
		Unsafe Behavior	.36	.50

Note. N = 115.

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Table 10

Alumni Sample Factor Loadings for Principal Components Analysis of Deviant Behavior Categories

One Factor Solution		Two Factor Solution		
Category	Factor Loading	Category	Factor 1 Loading	Factor 2 Loading
Misuse of Information	.87	Misuse of Time and Resources	.96	-.13
Theft and Related Behavior	.83	Poor Attendance	.87	-.10
Misuse of Time and Resources	.82	Misuse of Information	.84	.08
Poor Attendance	.76	Theft and Related Behavior	.83	.05
Inappropriate Verbal Actions	.74	Unsafe Behavior	.69	-.05
Destruction of Property	.71	Poor Quality Work	.56	.23
Poor Quality Work	.70	Inappropriate Verbal Actions	.54	.31
Unsafe Behavior	.63	Alcohol Use	.36	.25
Inappropriate Physical Actions	.60			
Alcohol Use	.53	Drug Use	-.11	.82
Drug Use	.48	Inappropriate Physical Actions	.06	.75
		Destruction of Property	.20	.73

Note. N = 343.

For the Alumni Sample, as presented in Table 10, the first factor has an eigenvalue of 5.51 and accounts for 50 percent of the variance, while the second factor has an eigenvalue of 1.17 and accounts for 11 percent of the variance. In general, all of the categories load quite highly on the first factor, but the level of the loading for different categories and the ordering of categories differs somewhat from that for the Student Sample. Here, the second factor in the two factor solution appears to be a method factor. The categories that load highly on the second factor, Drug Use, Inappropriate Physical Actions, and Destruction of Property are the categories which have the lowest means per item of any of the categories. The three categories which load on the second factor have a method in common rather than a content similarity.

It is not known why the method factor shows up clearly in the two-factor solution for the Alumni Sample and not for the Student Sample. It should be kept in mind, however, that the Student Sample was much smaller than the Alumni Sample and the results for that sample may not be stable. Also, for the Student Sample, even though results suggest the possibility of a second factor, this factor was not interpretable. It could be argued that perhaps the second factor is not interpretable because a one-factor solution is more appropriate.

Taken together, the results of the factor analyses suggest a strong common dimension underlying deviant employee behavior. For both samples, all categories load highly on the first factor. For the two factor solutions when using an oblique rotation, the two factors correlate quite highly (.35 and .50 for the Student Sample and the Alumni Sample, respectively), which suggests a large degree of commonality between the two

factors. For the larger, Alumni sample, when a second factor is separated off, it is a method factor rather than an additional interpretable factor. These results suggest that as the likelihood of an individual engaging in a certain type of deviant behavior increases, the likelihood of that individual engaging in a wide variety of other types of deviant behavior also increases.

Co-Occurrence Ratings

Multidimensional scaling analysis was conducted using the data from the co-occurrence ratings. Participants made their ratings on a seven point scale upon which 1 was anchored with "Very Unlikely to Co-Occur" and 7 was anchored with "Very Likely to Co-Occur." This type of a rating was made with regard to all possible pairs of deviant behavior categories. The co-occurrence ratings were used to directly form a similarity matrix for use in the multidimensional scaling analysis. One approach to creating a similarity matrix is to simply average the ratings made by all individuals for each of the pairs of categories. Table 11 presents the similarity matrix for the entire sample as a whole. All of the mean similarities between the pairs of items were in a fairly small range, from 3.26 to 5.45. This indicates that, in general, participants view all of the eleven deviant behavior categories as co-occurring to a certain degree. However, the similarities suggest that participants do not view any of the categories as extremely likely to co-occur, which would be reflected by mean similarities closer to seven. The categories were also not viewed as extremely unlikely to co-occur which would be reflected by means closer to one.

The highest similarities were those between Poor Attendance, Poor Quality Work, Alcohol Use, and Drug Use. This indicates that, on average, participants perceived these categories to be the most likely to co-occur. It is not surprising that individuals view these categories as co-occurring since alcohol and drug use on or off the job could contribute to both poor attendance and poor quality work. The lowest similarities were those between Inappropriate Physical Actions and Misuse of Information and Inappropriate Physical Actions and Poor Attendance. This indicates that participants perceived these categories to be the least likely to co-occur. This would suggest that participants perceive that if a person would engage in inappropriate physical actions, that person would not necessarily also engage in behaviors reflecting the misuse of information or poor attendance.

Insert Table 11 About Here

As input to the multidimensional scaling program, the similarity matrix presented in Table 11 was converted into a dissimilarity matrix by subtracting each of the similarities from a constant. ALSCAL was used to produce solutions for one to five dimensions. A scree test was conducted by plotting the stress indexes for all five configurations. The appropriate number of dimensions can be determined on the basis of the scree plot and where the stress index levels off. The one-dimensional solution had a stress level of .34. The stress level dropped to .12 for the two-dimensional solution, and to .05, .03, and .01 for the three- four- and five- dimensional solutions, respectively. The scree results suggest either a two-dimensional or three-dimensional solution. For the sake

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Table 11

Similarity Matrix for Co-Occurrence Data

Category	1	2	3	4	5	6	7	8	9	10
1. Theft and Related Behavior										
2. Destruction of Property	4.25									
3. Misuse of Information	4.17	4.08								
4. Misuse of Time and Resources	4.72	4.41	4.88							
5. Unsafe Behavior	3.54	4.47	3.53	3.51						
6. Poor Attendance	4.20	4.04	3.75	4.69	3.52					
7. Poor Quality Work	4.20	4.51	4.11	4.65	4.24	5.45				
8. Alcohol Use	4.28	4.59	3.94	4.26	4.77	5.24	5.31			
9. Drug Use	4.50	4.64	3.97	4.28	4.78	5.26	5.29	5.13		
10. Inappropriate Verbal Actions	3.67	4.30	3.63	3.34	3.67	3.45	3.89	5.13	5.13	
11. Inappropriate Physical Actions	3.50	4.36	3.26	3.12	3.72	3.30	3.69	5.02	5.06	4.99

Note: Ratings were made on a seven point scale with seven being the most likely to co-occur.

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of interpretability and parsimony, a two-dimensional solution was chosen. This solution is presented in Figure 2.

Insert Figure 2 About Here

Dimension 1 can be interpreted as reflecting the degree to which the behaviors are personal or impersonal or are directed at individuals or at the company. This dimension is similar to the Interpersonal-Organizational dimension proposed by the Robinson and Bennett (1995) typology. The behavior categories which fall in the most extreme negative area on this dimension contain mainly actions which are aimed at individuals. Inappropriate physical actions (labeled Physical in Figure 2), inappropriate verbal actions (labeled Verbal), and behaviors which endanger others due to lack of following safety procedures (labeled Safety) are all personal acts in that they are aimed at individuals. Those categories closer to zero on the second dimension are less personal. Some of the behaviors within Destruction of Property (labeled Property) can be aimed at individuals but some can also be aimed at the company. The behaviors within the categories of Alcohol Use and Drug Use are not primarily aimed at other individuals and are also not necessarily aimed at the company, which is reflected by its somewhat neutral location on this dimension. The behavior categories which fall in the most extreme positive area on this dimension contain mainly actions which are aimed at the organization rather than at individuals and are more impersonal actions. Poor Attendance (Attend), Misuse of Time and Resources (Timereso), and Misuse of Information (Informat) are all categories which

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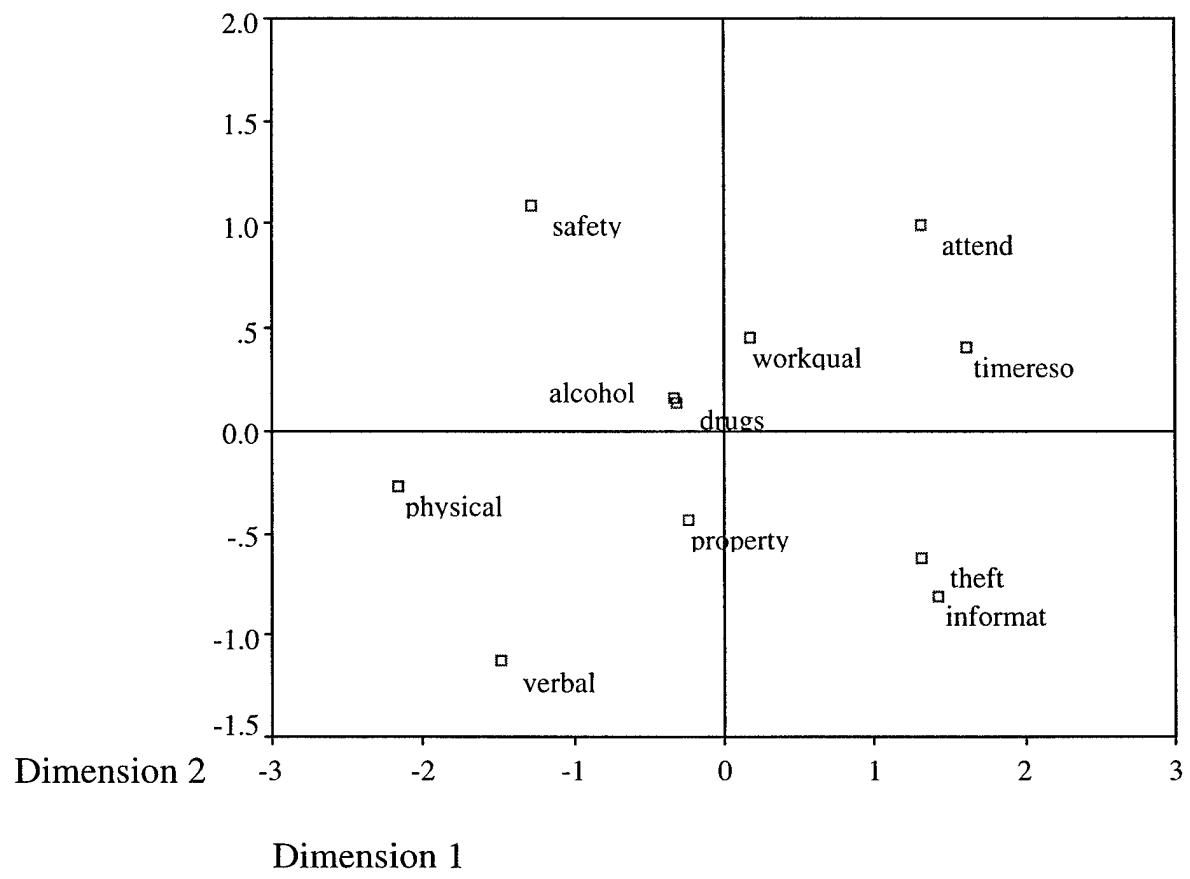
Figure 2: MDS Solution for the Alumni Sample Co-occurrence Rating Data

contain such behaviors. Theft and Related Behavior also falls in the positive area for dimension 1. Some of the behaviors within this category can be aimed at individuals (e.g., Take cash or property belonging to a co-worker or customer), but most reflect theft of various items from the company (e.g., office supplies, cash or property, equipment etc.).

Dimension 2 can be interpreted as reflecting task relevance. All of the behavior categories which fall on the positive area of this dimension can be described as being relevant to tasks which are performed within the context of a job. In general, employees should attend work (Attend), use time and resources appropriately (Timereso), have high quality work (Workqual), and not engage in activities which would put themselves or others in danger (Safety, Alcohol and Drugs). The behavior categories in the negative area reflect activities which are not related to tasks performed within the context of a job. Engaging in inappropriate physical or verbal actions toward others (Physical and Verbal), theft and related behavior (Theft), misuse of property (Property), and misuse of information (Informat) can all be viewed as somewhat separate from specific work tasks that must be performed within jobs.

The results of these analyses do not agree completely with the results of Robinson and Bennett (1995). While the first dimension which reflects the degree of personalness of the actions or the extent to which the actions are aimed at a person or at the company parallels Robinson and Bennett's Interpersonal-Organizational dimension, the second dimension does not correspond to their Minor-Serious dimension. The second dimension in this study corresponds to being related to work tasks. The solution does not at all reflect a dimension which is based on the severity of the behaviors. It is not clear why the

results differ from Robinson and Bennett. Perhaps one contributing factor was the use of individual behaviors in their study and the use of categories of behaviors in the current study.

Recall that in addition to the eleven categories of deviant behavior, two additional categories, Job Performance and Reporting Deviant Behavior, were included in the co-occurrence rating task for exploratory purposes. Job Performance reflected overall job performance and Reporting Deviant Behavior reflected seeing employees engage in unacceptable behavior and not reporting it. Participants rated the co-occurrence of these two categories with respect to all other deviant behavior categories. When job performance was included in the multidimensional scaling analysis with the deviant behavior categories, Job Performance separated off from all of the categories reflecting its own dimension. This indicates that the deviant behavior categories are seen as distinctly different from overall job performance.

When the Reporting Deviant Behavior category was included in the multidimensional scaling analysis with the deviant behavior categories, it did not separate off from all of the categories. This indicates that not reporting deviant behavior is viewed as similar to the other deviant behavior categories.

Comparison of Co-occurrence Ratings and Self Ratings

The correlation matrix from the self ratings for the Alumni Sample was subjected to multidimensional scaling analysis in order to give insight into whether results using the two different data collection methods for the same sample would converge. The correlations between the deviant behavior categories were viewed as a measure of

similarity and a dissimilarity matrix was formed by subtracting each of the correlations from one.

ALSCAL was used to produce solutions for one to five dimensions. A scree test was conducted by plotting the stress indexes for all five configurations. The one-dimensional solution had a stress level of .34. The stress level dropped to .19 for the two-dimensional solution, and to .10, .07, and .03 for the three- four- and five- dimensional solutions, respectively. The scree results suggest either a two-dimensional or three-dimensional solution. For the sake of interpretability and parsimony, a two-dimensional solution was chosen. This solution is presented in Figure 3.

Insert Figure 3 About Here

The results of the multidimensional scaling using this data differ from that produced by analyses conducted on the co-occurrence ratings. The dimensions are much less interpretable for this analysis. One item to note is the separation of Alcohol from Drugs by a substantial distance. Here, for the self-ratings, alcohol and drug use which occurs in the workplace and/or which occurs outside of the workplace but affects performance at work is seen as less similar than in the co-occurrence ratings. In the results for the co-occurrence ratings Drugs and Alcohol are in the same identical position in the solution.

The difference between the results for the co-occurrence ratings and the self ratings for the same sample is puzzling. In an effort to sort out why the multidimensional
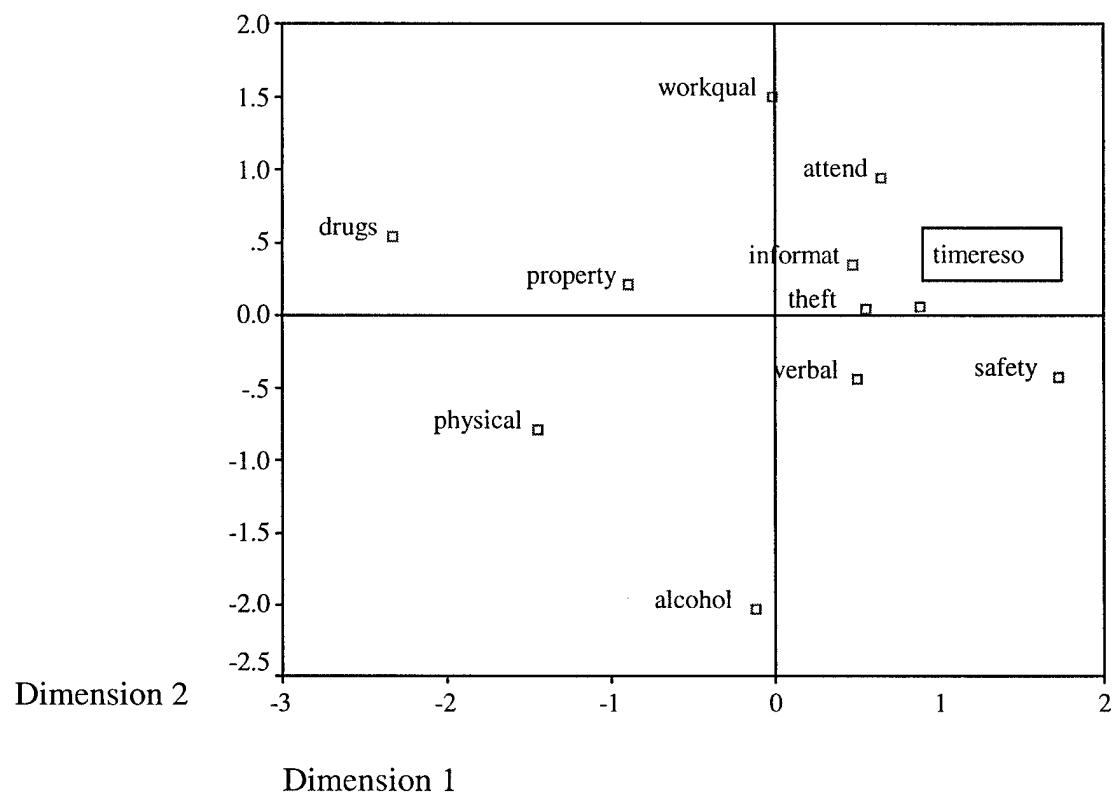
Figure 3: MDS Solution for the Alumni Sample Self Report Data

scaling results differed for the two sets of data, the correlation was calculated between the dissimilarities for the co-occurrence data and the dissimilarities for the self rating data. The correlation between the dissimilarities was -0.17 and was not significant. This indicates a vastly different pattern of ratings regarding the relationships between the various categories of deviant behavior for each of the two data collection methods.

Since the results did not agree for the two data collection methods, analyses were undertaken to determine whether results from the two samples, the Alumni and Student samples, completing the same rating task would produce similarity or agreement. In order to do this, the correlation matrix from the self ratings for the Student Sample was subjected to multidimensional scaling analysis. As for the Alumni Sample, the correlations between the categories of deviant behavior items were viewed as a measure of similarity and a dissimilarity matrix was formed by using the formula (1-r). The one-dimensional solution had a stress level of .25. The stress level dropped to .07 for the two-dimensional solution, and to .04, .01, and .00 for the three- four- and five- dimensional solutions, respectively. The scree results suggest either a two-dimensional or three-dimensional solution. For the sake of interpretability and parsimony, a two-dimensional solution was chosen. This solution is presented in Figure 4.

Insert Figure 4 About Here

The results from the Student Sample and the Alumni Sample self ratings are very similar. The placement of the categories along the dimensions would be very similar if
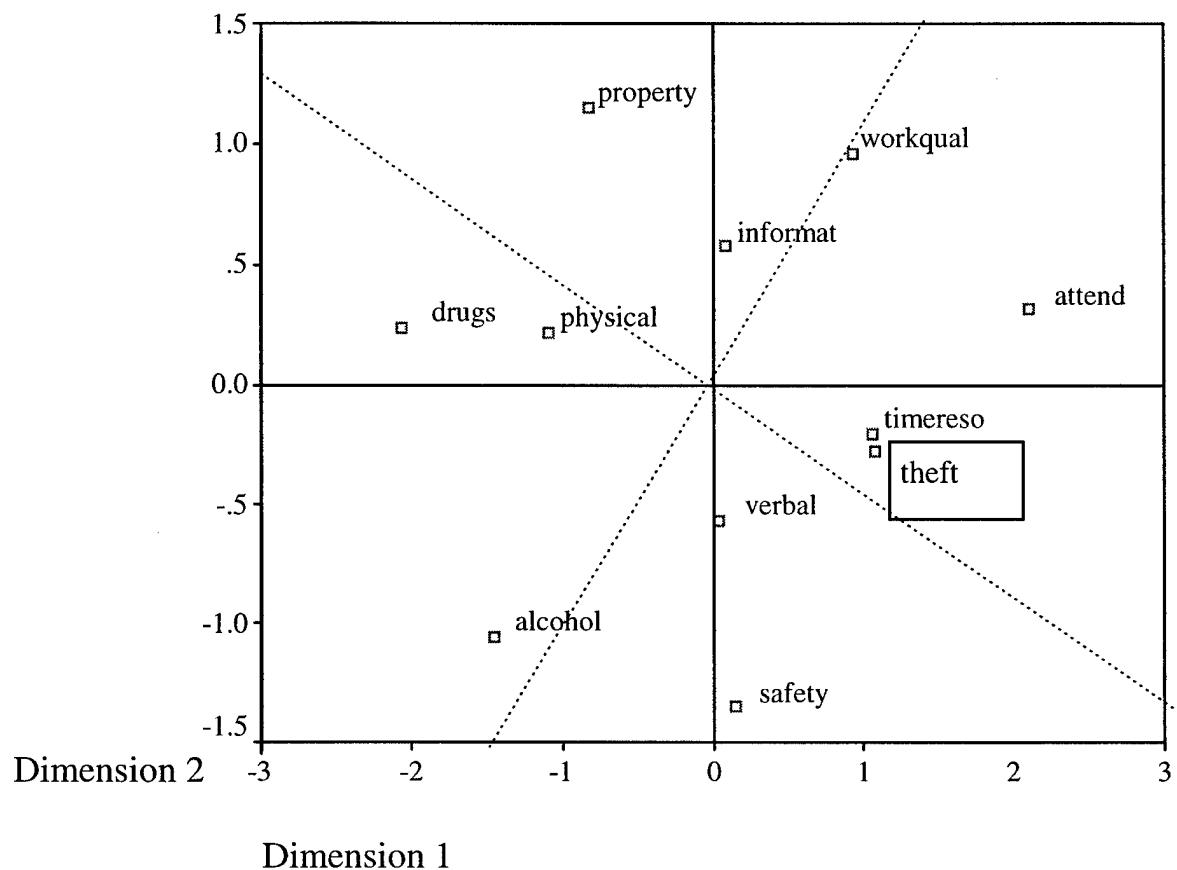
Figure 4: MDS Solution for Student Sample Self Report Data

the axis were rotated as indicated by the dotted lines in Figure 4. The correlation between the dissimilarities for the two sets of self rating data was .70 (p < .01). Thus, the self ratings produce similar results even though the samples providing the ratings are vastly different.

Discussion

There is vast range of behaviors which can be considered to be deviant in the workplace and organizations make great efforts to avoid such deviant behaviors on the part of their employees. This study represents a small step toward a better understanding of the structure or dimensionality of deviant employee behavior. Examining the relationships between various deviant behaviors will eventually contribute to more effective prediction and prevention of employee deviance in the workplace.

Robinson and Bennett (1995), Robinson and Greenberg (1998), and others have acknowledged the need for the development of a comprehensive theory of workplace deviance which includes all of the different types of deviant behavior which can occur in the workplace. In attempting to advance theory in this area, it is critical to first establish what is included in the domain of deviant behavior in the workplace This, in itself, is a complex issue, given the lack of an agreed upon definition of deviant workplace behavior. There is an incredible range of different types of deviant behaviors which can occur in the workplace. When working at the level of individual behaviors, there is a myriad of variations of behaviors within each type of deviant behavior which could be examined. This makes it difficult to determine which behaviors to include in a given study.

One of the strengths of this study is the inclusion of a broad range of deviant

behaviors. Many of the studies which were conducted in the past were not viewed as investigations into deviant employee behavior, but rather were aimed at exploring (and usually predicting) a specific type of deviant behavior (e.g., absenteeism, theft etc.). This study explicitly examined the relationships between a wide variety of deviant behaviors. Thus, an attempt was made to include as broad a range of behaviors as possible. Attempting to balance the concerns of survey length and the desire to collect as much valuable data as possible, this study included eleven categories of deviant employee behavior and eighty-seven individual behaviors. Although a broad range of different behaviors were included, future studies will hopefully be able to include an even broader range of behaviors. It will also be important to examine behaviors at various levels within content categories to further explore the relationships between them.

This study makes a number of contributions to the advancing knowledge in the area of deviant workplace behavior. The first contribution of the study rests in the adoption of a focus on the co-occurrence of behaviors. The survey for the Alumni Sample included a rating of co-occurrence of various behavior categories. In past literature, there had been a focus on the "similarity" of behaviors rather than on whether behaviors are likely to co-occur. Determining the level of co-occurrence of behaviors in the workplace is very informative to organizations. The prediction and prevention of deviant behavior in organizations will be enhanced as the level of co-occurrence of the behaviors becomes known.

Another contribution of the study relates to the potential "lack of opportunity problem" which can exist in self-ratings. The study addressed this problem by having

participants assume that they would have the opportunity to engage in each of the behaviors included in the survey and then asking individuals to respond to a rating scale which focused on the likelihood that they would engage in the behavior. This allowed for ratings by each participant on the entire range of behaviors. This ratings method stands in contrast to other rating methods which ask individuals to indicate whether they have engaged in various behaviors. The behavior items used within this rating format must be matched specifically to the respondent's job in order to get accurate responses, which limits the number and range of behaviors to which participants can respond. The rating method used in this study can be used to collect data on a wide range of behaviors from individuals working in any position. This will allow for investigation of whether similar results are obtained using different groups of individuals.

The largest contribution of this study is the sets of results which it provides. Since little is known about the dimensionality or structure of deviant employee behavior, the results of this study provide much needed insight into this area. The results of this study contain a number of interesting findings which will be outlined here.

The first interesting result is the similarity in self ratings across the two samples. The self rating task, which required ratings all of the behaviors, was completed by both the Student Sample and the Alumni Sample. It is surprising how similar their ratings were given that the samples are very different. The Student Sample was young (mean age 22 years), primarily unmarried, and had little work experience (mean of 2 years). The Alumni Samples was older (mean age 40 years), primarily married, had much more work experience (mean of 16 years), and mostly worked in managerial, technical, and

professional positions. In addition, it is of note that the Alumni Sample was very highly educated with fifty-nine percent of the sample having education beyond an undergraduate degree. The means and standard deviations for all of the behavior items were extremely similar for both samples. In fact, the correlation between the means of the deviant behavior items for the two groups was .95 and the correlation between the standard deviations for the items was .92. The similarity in ratings is notable because it might be expected that the ratings would differ as a result of having two very different samples. It might be hypothesized that the younger sample might be more likely to engage in deviant behavior in the workplace than the older sample, especially for behavior items like alcohol or drug use or some of the behaviors related to the use of time and resources (e.g., Use internet for non-work purposes, Play computer games at work, Waste time at work). However, results do not support this.

Another interesting finding is the endorsement of certain items by many of the participants. Item level analyses of the deviant behavior items indicated that some items, such as "Use email for personal purposes," "Make personal photocopies at work," and "Use sick leave when not really sick" were endorsed by a large portion of the sample as behaviors in which they would be quite likely to engage in a wide variety of circumstances. Perhaps most individuals view these behaviors or activities as perks of the job rather than as wrongdoing. If this is the case, then it is likely that organizational rules and sanctions against such behavior will be less effective, as individuals will likely engage in them even if these behaviors are known to be against company policy.

Also focusing on item level analyses, there were some items included on the

survey which reflected the same behavior and different targets of that behavior. Participant ratings did not differ to a large extent across these items. For example, if an individual reported being likely to engage in theft from the company, that individual also reported being likely to engage in theft from a coworker and also from a customer. Thus, future surveys could likely include all potential targets of the behavior in a single item. For example, one item could incorporate theft from three different sources: "Take cash or property from the company, a coworker, or a customer."

Correlational analyses indicate a general pattern of positive correlations between all deviant behavior items. This indicates that as the likelihood that an individual will engage in one type of deviant behavior increases, the likelihood of the individual to engage in another type of deviant behavior also increases. Further, the lack of significant negative correlations between the deviant behavior items suggests that it is not the case that if an individual would be more likely to engage in one type of behavior that the individual would be less likely to engage in another type of deviant behavior.

Empirical support was found for the use of categories of behaviors that were formed on the basis of content themes. Alpha estimates of reliability were in the .7 to .8 range for most of the deviant behavior content categories for both samples and LISREL analyses suggested a moderate fit for an eleven factor model which corresponds to the eleven deviant behavior categories. Support for the use of the categories is useful in that future studies can characterize deviant employee behavior which occurs in the workplace in terms of these content categories. The categories can be used as a means of organizing extensive lists of behaviors. Further, exploring the relationships between these categories

will continue to contribute to the formation of a taxonomy of deviant behavior. This, in turn, will contribute to the formation of an overall theory of deviant employee behavior.

It follows from the extreme similarity in the ratings at the item level that the content category composites means are very similar across the two samples. There was considerable difference in the means per item for the different categories. The highest means are for Misuse of Time and Resources, Unsafe Behavior, and Poor Attendance. These categories contain the items which were more highly endorsed as behaviors in which participants would being likely to engage. The first of these categories includes many of the items previously discussed with greater frequencies of higher ratings (e.g., Use email for personal use, Making personal photocopies at work). These things may be viewed as more of a perk of the job rather than as deviant behaviors. The behaviors included in the other two categories, Unsafe Behavior and Poor Attendance, are possibly just viewed as less severe by participants and are rated accordingly. It is also possible that even though these behaviors are intentional, they are more passive actions which may be viewed as less serious (e.g., Fail to read the manual outlining safety procedures, Endanger yourself by not following safety procedures, Leave work early without permission, Be absent from work without a legitimate excuse.). It may be for this reason that participants rate them as behaviors in which they are more likely to engage.

The lowest means for the deviant behavior categories are those for Destruction of Property, Drug Use, and Inappropriate Physical Actions. On average, participants indicated that they would be less likely to engage in the behaviors in these categories when compared to behaviors in the categories with higher means. It is possible that the

behaviors which are included in the categories are viewed as more severe or serious and are rated accordingly. For example, the Destruction of Property category contains an item related to sabotaging production and the Inappropriate Physical Actions contains items related to unwanted sexual advances and physical attack. The base rate of such behaviors is low, so it would be expected that most individuals would report not being likely to engage in such behaviors, thus yielding low item means for the individual items and therefore low means for these categories.

In general, most of the background and demographic variables were relatively uncorrelated with the categories of deviant behavior. However, age and work experience were significantly negatively related to the categories of deviant behavior for the Alumni Sample. This negative correlation indicates that older individuals are less likely to engage in these types of deviant behavior. In general, this result is not unexpected given the results of past research which suggest that older individuals are less likely to engage in deviant behavior in the workplace (e.g., Hollinger & Clark, 1983b). Many of the past studies which found this result were conducted on samples which were considerable younger and had considerably less range in age than the Alumni Sample and many were conducted using samples from retail organizations (e.g., fast food restaurants) which employ many young people. Therefore, it is notable that the negative relationship between age and deviant behavior still seems to hold in this sample where the mean age is 40 years old, as well. Work experience has a similar negative relationship with the deviant behavior categories for the Alumni Sample. Since the correlation is .86 between age and work experience, this is not surprising. For the Student Sample, age and work experience

were not significantly correlated with the deviant behavior categories. Instead, the correlations were near zero or negative and not significant. The correlations are likely not significant due to little variance in age and work experience for this sample.

The relationships between the categories of deviant behavior were examined in this study. It is not the case that all of the categories are highly correlated and not differentiated from one another. Although the relationships between the categories of deviant behavior vary, results suggest a strong common underlying factor when the categories are subjected to principal components analysis. When a second factor is extracted in the analyses, that factor reflected a method factor for the Alumni Sample and was not interpretable for the Student Sample. This argues for a single factor solution. This would suggest that as the likelihood of an individual engaging in one type of deviant behavior increases, the likelihood of that individual engaging in other types of deviant behaviors also increases. There are, of course, differences in base rates across behaviors, so this is not to suggest that an individual who will engage in one of the deviant behaviors will also engage in all other deviant behaviors. Even within a specific content category, a person who would engage in one or more of the behaviors in that category may not engage in other behavior in the category. For example, for the Theft and Related Behavior category, because a person would take office supplies doesn't necessarily mean that they would take cash or property or give away goods or services for free.

In terms of the dimensionality of deviant employee behavior, as explored by multidimensional scaling, the co-occurrence ratings yield a two-dimensional solution. The first dimension is a personal-impersonal dimension which reflects whether the

categories include behaviors which are aimed at individuals or at the company. This dimension parallels Robinson and Bennett's (1995) Interpersonal-Organizational dimension. Categories of behaviors such as Inappropriate Physical Actions and Inappropriate Verbal Actions fall on the personal end of this dimension since behaviors in these categories are aimed at individuals. Categories such as Poor Attendance, Misuse of Time and Resources, and Theft and Related Behavior are on the impersonal side of the dimension since behaviors in these categories are generally not aimed at individuals but rather are aimed at the organization.

The second dimension reflects task relevance, or the extent to which the categories include behaviors which are related to work tasks which are carried out on the job. One extreme on this dimension includes the Misuse of Time and Resources and Poor Work Quality categories, which contain behaviors which are directly related to carrying out work tasks. The other extreme on this dimension includes the Inappropriate Physical Actions, Inappropriate Verbal Actions, Theft and Related Behavior, and Destruction of Property categories, which contain behaviors that are not related to work tasks.

This two-dimensional solution differs from the two-dimensional solution found by Robinson and Bennett (1995). One dimension, the personal-impersonal dimension, found in this study corresponds to the Interpersonal-Organizational dimension found by Robinson and Bennett, but the other does not. Robinson and Bennett's second factor was a Minor-Serious dimension, whereas the second dimension in this study is task relevance.

When the Job Performance category was included in the multidimensional scaling analysis along with the deviant behavior categories, it separated off as its own dimension.

This indicates that participants who did the co-occurrence ratings see job performance as very different and separate from deviant employee behavior.

The multidimensional scaling analysis conducted using the self-ratings yielded a two-dimensional solution for which the dimensions were not clearly interpretable. It is possible that the reason for the lack of interpretability of the results is due to the fact that a one-dimensional solution is more suitable. The idea of a single dimension would also be supported by the principal components analysis on the self rating data, which suggests a single factor model would be most appropriate.

When comparing the multidimensional scaling analysis results for the self-ratings and results for the ratings of co-occurrence of the categories, the solutions differ substantially. It is interesting and at the same time frustrating that results from the two data collection methods do not converge (even for the same sample). At this time, there can only be speculation with regard to why the results using the two different types of ratings differ. Perhaps the participants engage in a certain degree of self-deception regarding whether they would engage in the deviant behaviors when making the self ratings. This would likely lead to individuals under-reporting the likelihood that they would engage in the behaviors. If so, it is also possible that individuals may under-report more severely for some of the behaviors that are perceived to be more severe. This could alter the relationships between the behaviors in a very complicated and unpredictable way, making the results using the self-ratings less useful.

Another possibility is that the rating task which includes rating categories of deviant behavior items is too complex. Behaviors themselves are complex and categories

of behavior are even more complex. There are multiple items in each of the categories which each have different patterns of relationships with one another and with the items in the other categories. This makes it difficult to rate the co-occurrence of two of the categories of behaviors. Individuals likely complete their ratings of co-occurrence based on stereotypes about the general content of the category. This may or may not reflect the actual co-occurrence of all of the behavior items in each of the categories. This issue may make the ratings of co-occurrence less useful. Future research should attempt to sort out the dimensionality of deviant behavior further by examining the relationships between various individual behavior items of all types. The current study did not examine individual differences in the perceptions, something which should be explored in future studies.

It is also a possibility that the perceptions of participants regarding the co-occurrence of various deviant behavior categories simply do not reflect reality. Perhaps the self-ratings provide a more accurate representation of the relationships between various types of deviant employee behavior. It is encouraging in this study to see that the two sets of results produced by the self ratings for the two samples indicate convergence for the multidimensional scaling analysis. This does not, however, necessarily suggest that the self ratings provide a more accurate picture of the dimensionality of deviant employee behavior. It is possible that neither of the two types of ratings accurately reflects reality.

The co-occurrence ratings yielded a more interpretable solution which suggests that the deviant behavior categories vary on two dimensions: a personal versus

impersonal dimension and a task-related versus task-unrelated dimension. This might lead to a desire to accept the results using the co-occurrence ratings and to disregard the self rating results. One might argue that the analysis using the self ratings used artificially created dissimilarity matrices formed from correlation matrices rather than collecting this information directly and thus the results from these analyses should not be trusted.

These are all possibilities which need to be sorted out in future studies. Further examination should be done on the relationships between individual deviant behaviors, the various categories of behavior, and also between the categories of behavior and other things such as various work attitudes and employee performance. Gaining insight into these relationships will enhance the understanding of deviant behavior and contribute to the formation of a comprehensive theory of such behavior.

The study utilized a main sample of older, well-educated individuals who hold primarily managerial and technical level positions. This is a limitation of the study in the sense that this sample may not represent the general working population well. It is encouraging, however, that the results using another sample of very different individuals, undergraduate students, seem to converge for the self ratings. However, the student sample may also be viewed as unrepresentative of the working population. Regardless of the representativeness of either sample, it is encouraging to see the results using the self-ratings for both samples converge. Further studies, however, should investigate deviant employee behavior using more varied samples.

The results of this study may be a function of the data collection methods and/or of the samples. Future research should attempt to determine why results might differ

when comparing data obtained through different data collection methods. Studies should also investigate whether similar patterns of dimensionality of deviant behavior are found using different data collection methods (e.g., organizational records, supervisory ratings) and more varied samples.

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APPENDIX A

SOURCES OF DEVIANT BEHAVIOR ITEMS

Sources of Deviant Behavior Items

Baron & Neuman (1996)

Acts of workplace aggression

Failing to deny false rumors about the target.
Failing to transmit information needed by the target.
Failing to return phone calls.
Giving someone "the silent treatment."
Spreading false rumors about the target.
Belittling someone's opinions to others.
Insults, yelling, shouting.
Flaunting status or authority; acting in condescending, superior manner.
Causing others to delay action on matter of importance to the target.
Failing to take steps that would protect the target's welfare or safety.
Purposely leaving a work area when target enters.
Reducing others' opportunities to express themselves (e.g., scheduling them at the end of
a session so they don't get their turn.)
Theft or destruction of property belonging to the target.
Needlessly consuming resources needed by the target.
Physical attack (e.g., pushing , shoving, hitting).
Negative or obscene gestures toward the target.

Hollinger, R. C. (1986); Hollinger & Clark (1982); and Hollinger & Clark (1983)

Property deviance items by industry sector

Retail Sector
   Misuse the discount privilege.
   Take store merchandise.
   Get paid for more hours than were worked.
   Purposely under-ring a purchase.
   Borrow or take money from employer without approval.
   Be reimbursed for more money than spent on business expenses.
   Purposely damage merchandise to buy it on discount.

Hospital Sector
   Take hospital supplies (e.g., linens, bandages).
   Take or use medications intended for patients.
   Get paid for more hours than were worked.
   Take hospital equipment or tools.
   Be reimbursed for more money than spent on business expenses.

Manufacturing Sector
    Take raw materials used in production.
    Get paid for more hours than were worked.
    Take company equipment or tools.
    Be reimbursed for more money than spent on business expenses.
    Take finished products.
    Take precious metals (e.g., platinum and gold).

Production deviance items by industry sector

* Same items used for retail, hospital and manufacturing industries.

Take a long lunch or coffee break without approval.
Come to work late or leave early.
Use sick leave when not really sick.
Do slow or sloppy work.
Work under the influence of alcohol or drugs.

Hollinger, Slora, & Terris (1992)

Personal property deviance items

Have you ever:
Taken merchandise or equipment from your employer without permission?
Taken company supplies or equipment for personal use?
Eaten food at work without paying for it?
Taken money from your employer without permission?
Changed company records to get paid for work not actually done?

Personal property deviance items

Have you ever:
Used employee discount privileges for friends?
Sold merchandise to friends at a reduced price?
Issued or received refunds for items not actually purchased?
Actually helped another person take company property or merchandise?

Production property deviance items

Have you ever:
Come to work late?
Left work early without permission?
Been absent from work without a legitimate excuse?

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Faked an illness and called in sick?
Faked and injury and received worker's compensation?
Done slow or sloppy work on purpose?
Engaged in drug use or alcohol consumption on the job?
Come to work hung over from alcohol or drugs?

Hunt (1996)

Attendance

Prototypical behaviors
        Be late for work without a good reason.
        Skip work without calling in.
        Use a weak excuse to stay home from work.
Peripheral behaviors
        Refuse to come to work when extra help is needed.

Off-task behavior

Prototypical behaviors
        Use store phones to make personal unauthorized calls.
        Conduct personal business during work time.
Peripheral behaviors
        Let joking friends be a distraction and interruption to work.
        Cheat on timecard by punching in before actually starting work.
        Do personal shopping while working.
        Leave a job half finished in a rush to leave for home.
        Take an unauthorized break.

Unruliness

Prototypical behaviors
        Make a mistake and blame another employee for it.
        Threaten or bully another employee.
        Refuse to take routine orders from supervisors.
Peripheral behaviors
        Knowingly repeat a mistake and not correct it.
        Fill out paperwork so sloppily it needs to be re-done.
        Take an unauthorized break.
        Not cooperate with other employees.
        Punch, kick, throw, or damage something in anger at work.
        Use loud and harsh swearing or vulgarity.
        Loudly complain about minor work problems.

Fly off the handle when something goes wrong at work.
Show off by defacing or destroying company property.

Theft

Prototypical behaviors
    (As a cashier) under-ring the price of merchandise for a friend.
    Advise friends how to steal merchandise.
    Allow non-employees in unauthorized areas.
    Fail to ring up a purchase and keep the money.
    Get into the habit of stealing small inexpensive merchandise.
    Hide merchandise until it goes on sale to buy it at a discount.
Peripheral behaviors
    Cheat on reporting time worked.
    Outright steal money from a cash register.
    Take one candy bar from a bay on a shelf.
    Steal small inexpensive merchandise.

Drug misuse

Prototypical behaviors
    Drink alcohol or take drugs on company property.
    Come to work under the influence of alcohol or drugs.
Peripheral behaviors
    Carry a firearm or weapon to work.
    Come to work with an apparent hangover.
    Possess, sell, or take drugs or alcohol on company property.

Jones (1980)

Employee deviance

Theft of merchandise.
No. times came intoxicated from alcohol.
No. times came hungover from alcohol.
No. drinks consumed on lunch/supper break.
No. times came intoxicated from drugs.
No. times drugs ingested at work.

Mangione & Quinn (1975)

Indicators of counterproductive behavior and drug use

Spread rumors or gossip to cause trouble at work.
Did work badly or incorrectly on purpose.
Stole merchandise or equipment from employer.
Damaged employer's property, equipment, or product on purpose.
Used drugs or chemicals (except vitamins or aspirin) to help get through the work day.

Raelin (1994)

I discuss confidential matters with unauthorized personnel within the organization as well
    as with those outside the organization.
I take extended work breaks.
I am absent (late) from work without sufficient cause.
Even though I am capable of doing better, I perform my job below acceptable standards.

Robinson & Bennett (1995)

Deviant workplace behavior

Employee	Stealing customer's possessions.
Boss	Verbally abusing employee.
Employee	Sabotaging equipment.
Employee	Coming to work late or leaving early.
Employee	Lying about hours worked.
Employee	Gossiping about manager.
Employee	Starting negative rumors about company.
Boss	Sexually harassing employee.
Employee	Physically abusing customer.
Employee	Taking excessive breaks.
Employee	Sabotaging merchandise.
Employee	Overcharging on services to profit him- or herself.
Employee	Intentionally making errors.
Employee	Covering up mistakes.
Employee	Leaving job in progress so with no directions so job is done wrong.
Boss	Following rules to the letter of the law.
Employee	Gossiping about co-worker.
Employee	Intentionally working slowly.
Boss	Unjustifiably firing employee.
Employee	Sexually harassing co-worker.

Employee	Accepting kickbacks.
Employee	Endangering him- or herself by not following safety procedures.
Boss	Leaving early and leaving his/her work for employee to do.
Employee	Hiding in back room to read the newspaper.
Employee	Stealing company equipment/merchandise.
Employee	Acting foolish in front of customers.
Employee	Verbally abusing customers.
Employee	Working unnecessary overtime.
Employee	Calling in sick when not.
Boss	Showing favoritism to certain employees.
Boss	Gossiping about employees.
Employee	Talking with co-worker instead of working.
Employee	Stealing money from cash drawer.
Employee	Misusing discount privilege.
Employee	Wasting company resources by turning up the heat and opening the windows.
Employee	Blaming co-worker for mistakes.
Employee	Misusing expense account.
Employee	Going against boss's decision.
Employees	Competing with co-workers in a nonbeneficial way.
Boss	Blaming employees for his/her mistakes.
Boss	Refusing to employee his/her earned benefits or pay.
Employee	Making personal long distance calls or mailing personal packages from work.
Employee	Endangering co-workers by reckless behavior.
Employee	Stealing co-worker's possessions.
Boss	Asking employee to work beyond job description.

Robinson & O'Leary-Kelly (1996)

Antisocial behaviors

Damaged property belonging to my employer.
Said or did something to purposely hurt someone at work.
Did work badly, incorrectly, or slowly on purpose.
Griped with coworkers.
Deliberately bent of broke a rule(s).
Criticized people at work.
Did something that harmed my employer or boss.
Started an argument with someone at work.
Said rude things about my supervisor or organization.

Ruggiero, Greenberger, & Steinberg, (1982)

Acts of occupational deviance

Employee theft
> Put more hours on timecard than actually worked.
> Purposely short-changed a customer.
> Took money from work.
> Gave away goods or services for nothing or less than the market value.
> Took things from employer or co-workers.

Non-theft deviance
> Called in sick when not.
> Was intoxicated or "high" on drugs at work.
> Lied to employer to get or keep job.
> Purposely damaged employer's property.

Skarlicki & Folger (1997)

Organizational retaliatory behaviors

On purpose, damaged equipment or work process.
Took supplies home without permission.
Wasted company materials.
Called in sick when not ill.
Spoke poorly about the company to others.
Refused to work weekends or overtime when asked.
Left a mess unnecessarily (did not clean up).
Disobeyed a supervisor's instructions.
"Talked back" to his or her boss.
Gossiped about his or her boss.
Spread rumors about coworkers.
Gave a coworker a "silent treatment."
Failed to give coworker required information.
Tried to look busy while wasting time.
Took an extended coffee or lunch break.
Intentionally worked slower.
Spent time on personal matters while at work.

Slora (1989)

Theft

Taken merchandise/equipment.
Taken supplies for personal use.
Eaten food without paying.
Taken money without permission.
Overcharged/shortchanged on purpose.
Changed company records.
Refunds for things not purchased.
Taken property form co-workers.
Falsified company documents.

Theft support

Employee discount used for friends.
Sold merchandise to friends at reduced price.
Helped person take company property.
Saw co-workers steal company cash or property.
Did not report theft by others.

Time theft

Come late to work.
Left work without permission.
Absent with no excuse.
Faking illness and calling in sick.

Counterproductivity

Damaged property while horsing around.
Wasted company materials on job.
Argued with customers, co-workers or supervisors.
Fought with customers, co-workers or supervisors.
Did slow, sloppy work on purpose.
Came to work hungover from drugs or alcohol.

Other items

Did not report wasted company materials.
Used company car without permission.
Faked injury for workman's compensation.

Terris & Jones (1982)

Theft techniques

Managers
> Not ring up sale and keep money.
> Falsify refunds, credit slips, bottle returns.
> Falsify over-ring slips and pocket money.
> Surreptitiously take merchandise home without authorization.
> Eat/drink unpaid-for merchandise.
> Outright thefts of cash from register.
> Overcharge/shortchange customers for personal gain.
> Allow friends/relatives to steal.
> Buy/take merchandise that was illegitimately marked down or put on outdate shelf.
> Forget to pay for merchandise taken on credit.

Cashiers and Clerks
> Not ring up sale and keep money.
> Falsify over-ring slips and pocket money.
> Eat/drink unpaid-for merchandise.
> Surreptitiously take merchandise home without authorization.
> Outright thefts of cash from register.
> Allow friends/relatives to steal.
> Overcharge/shortchange customers for personal gain.
> Falsify refunds, credit slips, bottle returns.
> Steal unreported cash drawer overages.
> Falsely mark food/merchandise as damaged or spoiled and then stealing it.

APPENDIX B

SELF-REPORT SURVEY

Self- Report Survey
Section 1 - Workplace Behavior

This survey will focus on a variety of different behaviors which may occur in the workplace setting. Specifically, you will be asked whether you would be likely to engage in various behaviors which employers would not want their employees to do. In general, these types of behavior may be described as violating the norms of the most organization. Some of the behaviors are things which most employees would be likely to do while other behaviors are likely to be done by only a small portion of employees. The study aims to examine how likely the various behaviors are in the workplace. Further, the study will examine the relationships between the various types of behaviors.

The survey will be asking whether you would be likely to engage in a variety of behaviors. When completing the survey, please assume that you have the opportunity to engage in all of the behaviors which are listed. Do not simply respond with regard to your present job, as it is likely that you would not have the opportunity to engage in all of the included behaviors in that job. Instead, imagine yourself in a position in which you would be able to do each of the behaviors.

There are a variety of job settings in which individuals may work. For example, some jobs have good working conditions while other jobs may take place in an undesirable atmosphere. Some organizations have harsh penalties or punishment for employee wrongdoing while other organizations may not have such sanctions in place. Some employees may work in organizations where they are treated unfairly by their supervisor and/or other organizational members. Some employees may be more satisfied with their current work situation than others. Any of these circumstance may have an influence upon whether or not individuals would engage in certain behaviors. Keep these circumstances in mind when completing the survey.

In rating each individual item, ask yourself, "How likely would I be to engage in this behavior?" In making your rating of how likely you are to engage in each behavior, also consider the circumstances which were mentioned above. Please make your rating on the seven-point scale which is presented below. A rating of 1 suggests that, no matter what the circumstances, you would not be likely to engage in the specific behavior. A rating of 7 indicates that in a wide variety of circumstances, you would be likely to engage in the specific behavior.

Use the following scale to rate all of the items. Provide your rating on the blank in front of each item. Keep in mind the following question:

How likely would you be to engage in the behavior?

1	2	3	4	5	6	7

No Matter What
the Circumstances,
I Would Not Engage
in the Behavior

In a Wide Variety
of Circumstances,
I Would Engage
in the Behavior

_____1. Yell or shout unnecessarily on the job.

_____2. Take cash or property belonging to the company.

_____3. Use company resources you aren't authorized to use.

_____4. Fail to read the manual outlining safety procedures.

_____5. Engage in alcohol consumption on the job.

_____6. Argue or fight with a co-worker.

_____7. Deliberately bend or break a rule(s).

_____8. Give away goods or services for free.

_____9. Deface, damage, or destroy property, equipment, or product belonging to the company.

_____10. Discuss confidential matters with unauthorized persons within or outside the organization.

_____11. Use sick leave when not really sick.

_____12. Intentionally do slow or sloppy work.

_____13. Physically attack (e.g., pushing, shoving, hitting) a customer.

_____14. Disobey supervisor's instructions.

_____15. Spread false rumors or gossip about a co-worker.

_____16. Cover up mistakes.

_____17. Come to work under the influence of drugs.

_____18. Endanger yourself by not following safety procedures.

_____19. Use email for personal purposes.

_____20. Alter time card to get paid for more hours than you worked.

How likely would you be to engage in the behavior?

1	2	3	4	5	6	7

**No Matter What
the Circumstances,
I Would Not Engage
in the Behavior**

**In a Wide Variety
of Circumstances,
I Would Engage
in the Behavior**

_____21. Carry a firearm or weapon to work to intimidate others.

_____22. Neglect or ignore customers.

_____23. Misuse business expense account.

_____24. Miss work without calling in.

_____25. Intentionally fail to give a supervisor or co-worker necessary information.

_____26. Accidentally damage or destroy property belonging to a co-worker.

_____27. Waste time on the job.

_____28. Have your performance affected due to a hangover from alcohol.

_____29. Make unwanted sexual advances toward a subordinate.

_____30. See employees engage in unacceptable behavior and not report it.

_____31. Make personal long distance calls at work.

_____32. Work unnecessary overtime.

_____33. Take cash or property belonging to a co-worker.

_____34. Sabotage the production of product in the company.

_____35. Intentionally perform your job below acceptable standards.

_____36. Verbally abuse a customer.

_____37. Deface, damage, or destroy property belonging to a customer.

_____38. Endanger coworkers by not following safety procedures.

_____39. Destroy or falsify company records or documents.

_____40. Physically attack (e.g., pushing, shoving, hitting) a co-worker.

_____41. Help another person or advise them how to take company property or

merchandise.

_____42. Waste company resources.

_____43. Engage in drug use on the job.

How likely would you be to engage in the behavior?

1	2	3	4	5	6	7

**No Matter What
the Circumstances,
I Would Not Engage
in the Behavior**

**In a Wide Variety
of Circumstances,
I Would Engage
in the Behavior**

_____44. Use a firearm or weapon against a co-worker.

_____45. Intentionally come to work late.

_____46. Accidentally damage or destroy property, equipment, or product belonging to the company.

_____47. Blame co-workers for your mistakes.

_____48. Make unwanted sexual advances toward a customer.

_____49. Take office supplies from the company.

_____50. Intentionally do work badly or incorrectly.

_____51. Fake an injury to avoid work duties.

_____52. Argue or fight with a supervisor.

_____53. Mail personal packages at work.

_____54. Come to work under the influence of alcohol.

_____55. Provide the organization with false information to obtain a job (i.e., regarding education or experience).

_____56. Verbally abuse a co-worker.

_____57. Provide goods or services at less than the price established by the company.

_____58. Deface, damage, or destroy property belonging to a co-worker.

_____59. Leave work early without permission.

_____60. Physically attack (e.g., pushing, shoving, hitting) a supervisor.

_____61. Allow non-employees in unauthorized areas.

_____62. Accidentally make mistakes on work tasks.

_____63. Spend time on the internet for reasons not related to work.

_____64. Use a firearm or weapon against a customer.

_____65. Take cash or property belonging to a customer.

How likely would you be to engage in the behavior?

1	2	3	4	5	6	7

**No Matter What
the Circumstances,
I Would Not Engage
in the Behavior**

**In a Wide Variety
of Circumstances,
I Would Engage
in the Behavior**

_____66. Have your performance affected due to a hangover from drugs.

_____67. Be absent from work without a legitimate excuse.

_____68. Make unwanted sexual advances toward a co-worker.

_____69. Endanger customers by not following safety procedures.

_____70. Misuse employee discount privileges.

_____71. Lie to employer or supervisor to cover up a mistake.

_____72. Argue or fight with a customer.

_____73. Accidentally damage or destroy property belonging to a customer.

_____74. Smoke in areas which are designated non-smoking.

_____75. Play computer games during work time.

_____76. Verbally abuse a supervisor.

_____77. Spread false rumors about the company.

_____78. Conduct personal business during work time.

_____79. Come to work late due to accidental reasons (e.g., car accident on the way to work).

_____80. Use sexually explicit language in the workplace.

_____81. Take petty cash from the company.

_____82. Fake an injury to receive worker's compensation.

_____83. Use a firearm or weapon against a supervisor.

_____84. Possess or sell drugs on company property.

_____85. Make personal photocopies at work.

_____86. Make unwanted sexual advances toward a supervisor.

_____87. Take a long lunch or coffee break without approval.

Section 2 - Background and Demographics

What is your age? _____ years

What is your sex? _____ Female _____ Male

What is your race? (check one)

_____ Black   _____ White   _____ Native American/Alaskan
                                                          Native

_____ Hispanic   _____ Asian/Pacific Islander _____ Other _____

Please indicate your level of education:

     High School - Years Completed   8   9   10   11   12

          Did you receive a diploma? Yes No   GED? Yes No

     Beyond high school, did you obtain post-secondary education? Yes No

          College - Years Completed _____   Degree received? Yes No

          Technical School - Years Completed _____ Degree received? Yes No

          Graduate School - Years Completed _____ Degree received? Yes No

     Major _____

Employment:

          Are you currently employed? _____ Yes _____ No

          If so, what is your job title? _____

          How long have you been employed in your current job? _____

          How many hours do you work per week? _____

          In what industry do you work? (check one)

          ___ Manufacturing ___ Finance ___ Banking ___Other _____

          How many years of full-time work experience do you have? _____ years

Feel free to provide comments on the survey:

APPENDIX C

FULL SURVEY

Workplace Behavior Survey

This portion of the survey asks whether you are likely to engage in a variety of behaviors in the workplace. When completing this portion of the survey, **please assume you have the opportunity** to engage in all of the behaviors which are listed. **Do not simply respond with regard to your present job**, as it is likely that you would not have the opportunity to engage in all of the included behaviors in that job. Instead, imagine yourself in a position in which you would be able to do each of the behaviors.

There are a variety of job settings in which individuals may work. For example, some jobs have good working conditions while other jobs may take place in an undesirable atmosphere. Some organizations have harsh penalties or punishments for employee wrongdoing while other organizations may not have such sanctions in place. Some employees may work in organizations where they are treated unfairly by their supervisor and/or other organizational members. Some employees may be more satisfied with their current work situation than others. Any of these circumstances may influence whether or not individuals engage in certain behaviors. Keep these circumstances in mind when completing the survey.

In rating each individual item, ask yourself, "Would I engage in this behavior?" When you rate how likely you are to engage in each behavior, consider the circumstances mentioned above. Please rate each statement using the seven-point scale presented below. A rating of **1** suggests that, no matter what the circumstances, you would *not* engage in the specific behavior. A rating of **7** indicates that in a wide variety of circumstances, you *would* engage in the specific behavior.

Marking Instructions:
Use a number 2 pencil only.
Do not use ink.
Make heavy black marks that fill the circle completely.
Erase cleanly any answer that you wish to change.

INCORRECT MARKS ③⑦◒⊙

CORRECT MARK ●

Section I: Personal Behavior

Use the following scale to rate all of the items:

No Matter What the Circumstances, I Would Not Engage in the Behavior   In a Wide Variety of Circumstances, I Would Engage in the Behavior

Keep in mind the following question:
Would I engage in this behavior in the workplace?

①	②	③	④	⑤	⑥	⑦	1. Yell or shout unnecessarily on the job.
①	②	③	④	⑤	⑥	⑦	2. Take cash or property belonging to the company.
①	②	③	④	⑤	⑥	⑦	3. Use company resources I am not authorized to use.
①	②	③	④	⑤	⑥	⑦	4. Fail to read the manual outlining safety procedures.
①	②	③	④	⑤	⑥	⑦	5. Engage in alcohol consumption on the job.
①	②	③	④	⑤	⑥	⑦	6. Argue or fight with a co-worker.
①	②	③	④	⑤	⑥	⑦	7. Deliberately bend or break a rule(s).
①	②	③	④	⑤	⑥	⑦	8. Give away goods or services for free.
①	②	③	④	⑤	⑥	⑦	9. Deface, damage, or destroy property, equipment, or product belonging to the company.
①	②	③	④	⑤	⑥	⑦	10. Discuss confidential matters with unauthorized persons within or outside the organization.
①	②	③	④	⑤	⑥	⑦	11. Use sick leave when not really sick.
①	②	③	④	⑤	⑥	⑦	12. Intentionally do slow or sloppy work.
①	②	③	④	⑤	⑥	⑦	13. Physically attack (e.g., pushing, shoving, hitting) a customer.
①	②	③	④	⑤	⑥	⑦	14. Disobey supervisor's instructions.
①	②	③	④	⑤	⑥	⑦	15. Spread false rumors or gossip about a co-worker.
①	②	③	④	⑤	⑥	⑦	16. Cover up mistakes.
①	②	③	④	⑤	⑥	⑦	17. Come to work under the influence of drugs.
①	②	③	④	⑤	⑥	⑦	18. Endanger myself by not following safety procedures.
①	②	③	④	⑤	⑥	⑦	19. Use email for personal purposes.

PLEASE DO NOT MARK IN THIS AREA
■○■○○■○○■○○○○○○○○○○○○○○○○

0293

Use the following scale to rate all of the items:

No Matter What the Circumstances, I Would Not Engage in the Behavior ... In a Wide Variety of Circumstances, I Would Engage in the Behavior

Keep in mind the following question:
Would I engage in this behavior in the workplace?

① ② ③ ④ ⑤ ⑥ ⑦   20. Alter time card to get paid for more hours than you worked.

① ② ③ ④ ⑤ ⑥ ⑦   21. Carry a firearm or weapon to work to intimidate others.

① ② ③ ④ ⑤ ⑥ ⑦   22. Neglect or ignore customers.

① ② ③ ④ ⑤ ⑥ ⑦   23. Misuse business expense account.

① ② ③ ④ ⑤ ⑥ ⑦   24. Miss work without calling in.

① ② ③ ④ ⑤ ⑥ ⑦   25. Intentionally fail to give a supervisor or co-worker necessary information.

① ② ③ ④ ⑤ ⑥ ⑦   26. Accidentally damage or destroy property belonging to a co-worker.

① ② ③ ④ ⑤ ⑥ ⑦   27. Waste time on the job.

① ② ③ ④ ⑤ ⑥ ⑦   28. Have my performance affected due to a hangover from alcohol.

① ② ③ ④ ⑤ ⑥ ⑦   29. Make unwanted sexual advances toward a subordinate.

① ② ③ ④ ⑤ ⑥ ⑦   30. See employees engage in unacceptable behavior and not report it.

① ② ③ ④ ⑤ ⑥ ⑦   31. Make personal long distance calls at work.

① ② ③ ④ ⑤ ⑥ ⑦   32. Work unnecessary overtime.

① ② ③ ④ ⑤ ⑥ ⑦   33. Take cash or property belonging to a co-worker.

① ② ③ ④ ⑤ ⑥ ⑦   34. Sabotage the production of product in the company.

① ② ③ ④ ⑤ ⑥ ⑦   35. Intentionally perform my job below acceptable standards.

① ② ③ ④ ⑤ ⑥ ⑦   36. Verbally abuse a customer.

① ② ③ ④ ⑤ ⑥ ⑦   37. Deface, damage, or destroy property belonging to a customer.

① ② ③ ④ ⑤ ⑥ ⑦   38. Endanger co-workers by not following safety procedures.

① ② ③ ④ ⑤ ⑥ ⑦   39. Destroy or falsify company records or documents.

① ② ③ ④ ⑤ ⑥ ⑦   40. Physically attack (e.g., pushing, shoving, hitting) a co-worker.

① ② ③ ④ ⑤ ⑥ ⑦   41. Help another person or advise them how to take company property or merchandise.

① ② ③ ④ ⑤ ⑥ ⑦   42. Waste company resources.

① ② ③ ④ ⑤ ⑥ ⑦   43. Engage in drug use on the job.

① ② ③ ④ ⑤ ⑥ ⑦   44. Use a firearm or weapon against a co-worker.

① ② ③ ④ ⑤ ⑥ ⑦   45. Intentionally come to work late.

① ② ③ ④ ⑤ ⑥ ⑦   46. Accidentally damage or destroy property, equipment, or product belonging to the company.

① ② ③ ④ ⑤ ⑥ ⑦   47. Blame co-workers for my mistakes.

① ② ③ ④ ⑤ ⑥ ⑦   48. Make unwanted sexual advances toward a customer.

① ② ③ ④ ⑤ ⑥ ⑦   49. Take office supplies from the company.

① ② ③ ④ ⑤ ⑥ ⑦   50. Intentionally do work badly or incorrectly.

① ② ③ ④ ⑤ ⑥ ⑦   51. Fake an injury to avoid work duties.

① ② ③ ④ ⑤ ⑥ ⑦   52. Argue or fight with a supervisor.

① ② ③ ④ ⑤ ⑥ ⑦   53. Mail personal packages at work.

① ② ③ ④ ⑤ ⑥ ⑦   54. Come to work under the influence of alcohol.

① ② ③ ④ ⑤ ⑥ ⑦   55. Provide the organization with false information to obtain a job (i.e., regarding education or experience).

① ② ③ ④ ⑤ ⑥ ⑦   56. Verbally abuse a co-worker.

① ② ③ ④ ⑤ ⑥ ⑦   57. Provide goods or services at less than the price established by the company.

① ② ③ ④ ⑤ ⑥ ⑦   58. Deface, damage, or destroy property belonging to a co-worker.

① ② ③ ④ ⑤ ⑥ ⑦   59. Leave work early without permission.

① ② ③ ④ ⑤ ⑥ ⑦   60. Physically attack (e.g., pushing, shoving, hitting) a supervisor.

① ② ③ ④ ⑤ ⑥ ⑦   61. Allow non-employees in unauthorized areas.

① ② ③ ④ ⑤ ⑥ ⑦   62. Accidentally make mistakes on work tasks.

① ② ③ ④ ⑤ ⑥ ⑦   63. Spend time on the internet for reasons not related to work.

① ② ③ ④ ⑤ ⑥ ⑦   64. Use a firearm or weapon against a customer.

Section I: Personal Behavior *continued*

Use the following scale to rate all of the items:

No Matter
What the
Circumstances,
I Would Not
Engage In
the Behavior

In a Wide
Variety of
Circumstances,
I Would
Engage in
the Behavior

Keep in mind the following question:
Would I engage in this behavior in the workplace?

① ② ③ ④ ⑤ ⑥ ⑦   65. Take cash or property belonging to a customer.
① ② ③ ④ ⑤ ⑥ ⑦   66. Have your performance affected due to a hangover from drugs.
① ② ③ ④ ⑤ ⑥ ⑦   67. Be absent from work without a legitimate excuse.
① ② ③ ④ ⑤ ⑥ ⑦   68. Make unwanted sexual advances toward a co-worker.
① ② ③ ④ ⑤ ⑥ ⑦   69. Endanger customers by not following safety procedures.
① ② ③ ④ ⑤ ⑥ ⑦   70. Misuse employee discount privileges.
① ② ③ ④ ⑤ ⑥ ⑦   71. Lie to employer or supervisor to cover up a mistake.
① ② ③ ④ ⑤ ⑥ ⑦   72. Argue or fight with a customer.
① ② ③ ④ ⑤ ⑥ ⑦   73. Accidentally damage or destroy property belonging to a customer.
① ② ③ ④ ⑤ ⑥ ⑦   74. Smoke in areas which are designated non-smoking.
① ② ③ ④ ⑤ ⑥ ⑦   75. Play computer games during work time.
① ② ③ ④ ⑤ ⑥ ⑦   76. Verbally abuse a supervisor.
① ② ③ ④ ⑤ ⑥ ⑦   77. Spread false rumors about the company.
① ② ③ ④ ⑤ ⑥ ⑦   78. Conduct personal business during work time.
① ② ③ ④ ⑤ ⑥ ⑦   79. Come to work late due to accidental reasons (e.g., car accident on the way to work).

① ② ③ ④ ⑤ ⑥ ⑦   80. Use sexually explicit language in the workplace.
① ② ③ ④ ⑤ ⑥ ⑦   81. Take petty cash from the company.
① ② ③ ④ ⑤ ⑥ ⑦   82. Fake an injury to receive worker's compensation.
① ② ③ ④ ⑤ ⑥ ⑦   83. Use a firearm or weapon against a supervisor.
① ② ③ ④ ⑤ ⑥ ⑦   84. Possess or sell drugs on company property.
① ② ③ ④ ⑤ ⑥ ⑦   85. Make personal photocopies at work.
① ② ③ ④ ⑤ ⑥ ⑦   86. Make unwanted sexual advances toward a supervisor.
① ② ③ ④ ⑤ ⑥ ⑦   87. Take a long lunch or coffee break without approval.

This portion of the survey focuses on categories of behaviors and how these categories are related. When completing this portion of the survey, think about the behavior of other employees in the workplace. Consider the whole range of possible behavior by employees and think about employees in general when responding to this portion of the survey.

Please familiarize yourself with the behavior categories in the box below. In this section of the survey, the categories of behavior are presented in pairs. Think about whether the behaviors in the two categories are likely to co-occur. If the behaviors in the two categories co-occur, employees who engage in the behaviors in one of the categories would also engage in the behaviors in the other category. Further, employees who would not engage in the behaviors in one of the categories in the pair would also not engage in the behaviors in the other category in the pair. If the behaviors in the two categories in the pair do *not co-occur*, then employees who engage in the behaviors in one of the categories would not engage in the behaviors in the other category in the pair.

When rating each individual pair of categories, ask yourself, "How likely are the two categories of behavior to co-occur in the workplace?" Please make your ratings on the seven-point scale presented below. A rating of 1 suggests that the categories of behavior are *very unlikely* to co-occur. A rating of 7 indicates that the categories of behavior are *very likely* to co-occur.

Section II: Categories of Behavior

1. **Theft and Related Behavior**
   Take cash or property from the company, co-workers, or customers. Taking office supplies or petty cash from the company. Give away goods or services for free or at reduced prices. Misuse employee discount privileges or business expense account.

2. **Destruction of Property**
   Deface, damage, or destroy property, equipment, or product belonging to the company, co-workers, or customers. Sabotage production of product in the company.

3. **Misuse of Information**
   Discuss confidential matters with unauthorized personnel within or outside the organization. Intentionally fail to give supervisor or co-worker necessary information. Destroy or falsify company records or documents. Provide the organization with false information to obtain a job. Lie to employer or supervisor to cover up a mistake.

4. **Misuse of Time and Resources**
   Waste company resources. Use resources not authorized to use. Alter time card to get paid for more hours than worked, worked unnecessary overtime, or taking a long lunch or coffee break. Waste time on the job. Conduct personal business during work time. Make personal long distance phone calls or photocopies, mail personal packages. Use email for personal purposes. Spend time on the internet for reasons not related to work. Play computer games during work time.

5. **Unsafe Behavior**
   Fail to read manual outlining safety procedures. Endanger self, co-workers, or customers by not following safety procedures.

6. **Poor Attendance**
   Use sick leave when not sick. Intentionally come to work late or leave work early without permission. Miss work without calling in or be absent from work without a legitimate excuse.

7. **Poor Quality Work**
   Intentionally do slow or sloppy work or do work badly or incorrectly. Intentionally perform job below acceptable standards.

8. **Alcohol Use**
   Engage in alcohol use on the job, come to work under the influence of alcohol, or have performance affected by an alcohol hangover.

9. **Drug Use**
   Possess or sell drugs on company property, engage in drug use on the job, come to work under the influence of drugs, or have performance affected by a drug hangover.

10. **Inappropriate Verbal Actions**
    Yell or shout on the job. Argue or fight with a co-worker, supervisor, or customer. Verbally abuse a co-worker, supervisor, or customer. Using sexually explicit language in the workplace.

11. **Inappropriate Physical Actions**
    Physically attack a co-worker, supervisor, or customer. Making unwanted sexual advances toward a subordinate, supervisor, co-worker, or customer.

12. **Not Reporting Deviant Behavior**
    See employees engage in unacceptable behavior and not report it.

13. **Overall Job Performance**
    Performs job duties well. Provides a positive contribution to the organization. Helps other employees as needed.

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Section II: Categories of Behavior *continued*

Use the following scale to rate all of the items:

Keep in mind the following question:
How likely are the two categories of behavior to co-occur in the workplace?

Very Unlikely to Co-occur   Very Likely to Co-occur

① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 2. Destruction of Property
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 3. Misuse of Information
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 4. Misuse of Time and Resources
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 5. Unsafe Behavior
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 6. Poor Attendance
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 7. Poor Quality Work
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 8. Alcohol Use
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 9. Drug Use
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 10. Inappropriate Verbal Actions
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 11. Inappropriate Physical Actions
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	1. Theft and Related Behavior & 13. Overall Job Performance
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 3. Misuse of Information
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 4. Misuse of Time and Resources
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 5. Unsafe Behavior
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 6. Poor Attendance
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 7. Poor Quality Work
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 8. Alcohol Use
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 9. Drug Use
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 10. Inappropriate Verbal Actions
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 11. Inappropriate Physical Actions
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	2. Destruction of Property & 13. Overall Job Performance
① ② ③ ④ ⑤ ⑥ ⑦	3. Misuse of Information & 4. Misuse of Time and Resources
① ② ③ ④ ⑤ ⑥ ⑦	3. Misuse of Information & 5. Unsafe Behavior
① ② ③ ④ ⑤ ⑥ ⑦	3. Misuse of Information & 6. Poor Attendance
① ② ③ ④ ⑤ ⑥ ⑦	3. Misuse of Information & 7. Poor Quality Work
① ② ③ ④ ⑤ ⑥ ⑦	3. Misuse of Information & 8. Alcohol Use
① ② ③ ④ ⑤ ⑥ ⑦	3. Misuse of Information & 9. Drug Use
① ② ③ ④ ⑤ ⑥ ⑦	3. Misuse of Information & 10. Inappropriate Verbal Actions
① ② ③ ④ ⑤ ⑥ ⑦	3. Misuse of Information & 11. Inappropriate Physical Actions
① ② ③ ④ ⑤ ⑥ ⑦	3. Misuse of Information & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	3. Misuse of Information & 13. Overall Job Performance
① ② ③ ④ ⑤ ⑥ ⑦	4. Misuse of Time and Resources & 5. Unsafe Behavior
① ② ③ ④ ⑤ ⑥ ⑦	4. Misuse of Time and Resources & 6. Poor Attendance
① ② ③ ④ ⑤ ⑥ ⑦	4. Misuse of Time and Resources & 7. Poor Quality Work
① ② ③ ④ ⑤ ⑥ ⑦	4. Misuse of Time and Resources & 8. Alcohol Use
① ② ③ ④ ⑤ ⑥ ⑦	4. Misuse of Time and Resources & 9. Drug Use
① ② ③ ④ ⑤ ⑥ ⑦	4. Misuse of Time and Resources & 10. Inappropriate Verbal Actions
① ② ③ ④ ⑤ ⑥ ⑦	4. Misuse of Time and Resources & 11. Inappropriate Physical Actions
① ② ③ ④ ⑤ ⑥ ⑦	4. Misuse of Time and Resources & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	4. Misuse of Time and Resources & 13. Overall Job Performance
① ② ③ ④ ⑤ ⑥ ⑦	5. Unsafe Behavior & 6. Poor Attendance
① ② ③ ④ ⑤ ⑥ ⑦	5. Unsafe Behavior & 7. Poor Quality Work
① ② ③ ④ ⑤ ⑥ ⑦	5. Unsafe Behavior & 8. Alcohol Use
① ② ③ ④ ⑤ ⑥ ⑦	5. Unsafe Behavior & 9. Drug Use
① ② ③ ④ ⑤ ⑥ ⑦	5. Unsafe Behavior & 10. Inappropriate Verbal Actions
① ② ③ ④ ⑤ ⑥ ⑦	5. Unsafe Behavior & 11. Inappropriate Physical Actions
① ② ③ ④ ⑤ ⑥ ⑦	5. Unsafe Behavior & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	5. Unsafe Behavior & 13. Overall Job Performance

Section II: Categories of Behavior *continued*

Use the following scale to rate all of the items:

Keep in mind the following question:

How likely are the two categories of behavior to co-occur in the workplace?

Very Unlikely to Co-occur   Very Likely to Co-occur

① ② ③ ④ ⑤ ⑥ ⑦	Item
① ② ③ ④ ⑤ ⑥ ⑦	6. Poor Attendance & 7. Poor Quality Work
① ② ③ ④ ⑤ ⑥ ⑦	6. Poor Attendance & 8. Alcohol Use
① ② ③ ④ ⑤ ⑥ ⑦	6. Poor Attendance & 9. Drug Use
① ② ③ ④ ⑤ ⑥ ⑦	6. Poor Attendance & 10. Inappropriate Verbal Actions
① ② ③ ④ ⑤ ⑥ ⑦	6. Poor Attendance & 11. Inappropriate Physical Actions
① ② ③ ④ ⑤ ⑥ ⑦	6. Poor Attendance & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	6. Poor Attendance & 13. Overall Job Performance
① ② ③ ④ ⑤ ⑥ ⑦	7. Poor Quality Work & 8. Alcohol Use
① ② ③ ④ ⑤ ⑥ ⑦	7. Poor Quality Work & 9. Drug Use
① ② ③ ④ ⑤ ⑥ ⑦	7. Poor Quality Work & 10. Inappropriate Verbal Actions
① ② ③ ④ ⑤ ⑥ ⑦	7. Poor Quality Work & 11. Inappropriate Physical Actions
① ② ③ ④ ⑤ ⑥ ⑦	7. Poor Quality Work & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	7. Poor Quality Work & 13. Overall Job Performance
① ② ③ ④ ⑤ ⑥ ⑦	8. Alcohol Use & 9. Drug Use
① ② ③ ④ ⑤ ⑥ ⑦	8. Alcohol Use & 10. Inappropriate Verbal Actions
① ② ③ ④ ⑤ ⑥ ⑦	8. Alcohol Use & 11. Inappropriate Physical Actions
① ② ③ ④ ⑤ ⑥ ⑦	8. Alcohol Use & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	8. Alcohol Use & 13. Overall Job Performance
① ② ③ ④ ⑤ ⑥ ⑦	9. Drug Use & 10. Inappropriate Verbal Actions
① ② ③ ④ ⑤ ⑥ ⑦	9. Drug Use & 11. Inappropriate Physical Actions
① ② ③ ④ ⑤ ⑥ ⑦	9. Drug Use & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	9. Drug Use & 13. Overall Job Performance
① ② ③ ④ ⑤ ⑥ ⑦	10. Inappropriate Verbal Actions & 11. Inappropriate Physical Actions
① ② ③ ④ ⑤ ⑥ ⑦	10. Inappropriate Verbal Actions & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	10. Inappropriate Verbal Actions & 13. Overall Job Performance
① ② ③ ④ ⑤ ⑥ ⑦	11. Inappropriate Physical Actions & 12. Not Reporting Deviant Behavior
① ② ③ ④ ⑤ ⑥ ⑦	11. Inappropriate Physical Actions & 13. Overall Job Performance
① ② ③ ④ ⑤ ⑥ ⑦	12. Not Reporting Deviant Behavior & 13. Overall Job Performance

Section III: Background and Demographics

1. What is your gender?

○ Female
○ Male

2. What is your age in years?

[grid of bubbles: two columns each with digits ⓪①②③④⑤⑥⑦⑧⑨]

3. What is your marital status?

○ Married/Living with Partner
○ Divorced/Separated/Widowed
○ Single

4. What is your race/ethnic group?

○ African-American
○ American Indian or Alaskan Native
○ Asian or Pacific Islander
○ Chicano/Latino/ Hispanic
○ Caucasian
○ Other _____

5. Please indicate your level of education:

High School - Years Completed   ⑧   ⑨   ⑩   ⑪   ⑫

    Did you receive a diploma?   Yes ○   No ○

    Did you receive a GED?   Yes ○   No ○

Beyond high school, did you obtain
post-secondary education?   Yes ○   No ○

College - Years Completed	Technical School - Years Completed	Graduate School - Years Completed
Degree received? Yes ○ No ○ Major _____	Degree received? Yes ○ No ○ Major _____	Degree received? Yes ○ No ○ Major _____

6. Employment:

Are you currently employed?   Yes ○   No ○   If so, what is your job title? _____

Which of the following occupational categories
best describes the position in which you work?
(Choose only one.)

○ Professional, technical, and managerial
○ Clerical, data processing, couriers, sales, stock,
    customer service, and travel
○ Service - housekeepers, cooks, wait staff,
    barbers, janitors, security, med-aids, daycare
○ Landscaping, agriculture, fishing, forestry, and
    related
○ Mixing-molding-extruding, metal, plastic, wood,
    chemical, glass, stone
○ Machine trades - metal work, machine operator,
    mechanics, wood work
○ General factory work - making, assembling, and
    repairing products
○ Welding, cutting, body work, electrical, painter,
    carpenter, construction
○ Miscellaneous - driver, warehouse, packaging,
    gas attendant, stationery engineer, graphics
○ Other
_____

In what industry do you work? (Choose only one.)

○ Agricultural services, forestry, and fishing
○ Mining
○ Construction
○ Manufacturing
○ Transportation, communication, and public utilities
○ Wholesale trade
○ Retail trade
○ Finance, insurance, and real estate
○ Service industries
○ Public administration
○ Other
_____

Which of the following *best* describes the organization
for which you work?

○ Non-profit
○ For profit

6. Employment *continued*:

How long have you been employed in your current job?

Years	Months
⓪ ⓪	⓪
① ①	①
② ②	②
③ ③	③
④ ④	④
⑤ ⑤	⑤
⑥ ⑥	⑥
⑦ ⑦	⑦
⑧ ⑧	⑧
⑨ ⑨	⑨
	⑩
	⑪

How many hours do you work per week?

⓪	⓪
①	①
②	②
③	③
④	④
⑤	⑤
⑥	⑥
⑦	⑦
⑧	⑧
⑨	⑨

How many years of full-time work experience do you have?

⓪	⓪
①	①
②	②
③	③
④	④
⑤	⑤
⑥	⑥
⑦	⑦
⑧	⑧
⑨	⑨

What was your annual income last year? (Please round to the nearest $1,000.)

$ [ ][ ][ ] ,000

⓪	⓪	⓪
①	①	①
②	②	②
③	③	③
④	④	④
⑤	⑤	⑤
⑥	⑥	⑥
⑦	⑦	⑦
⑧	⑧	⑧
⑨	⑨	⑨

7. Additional Comments:

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